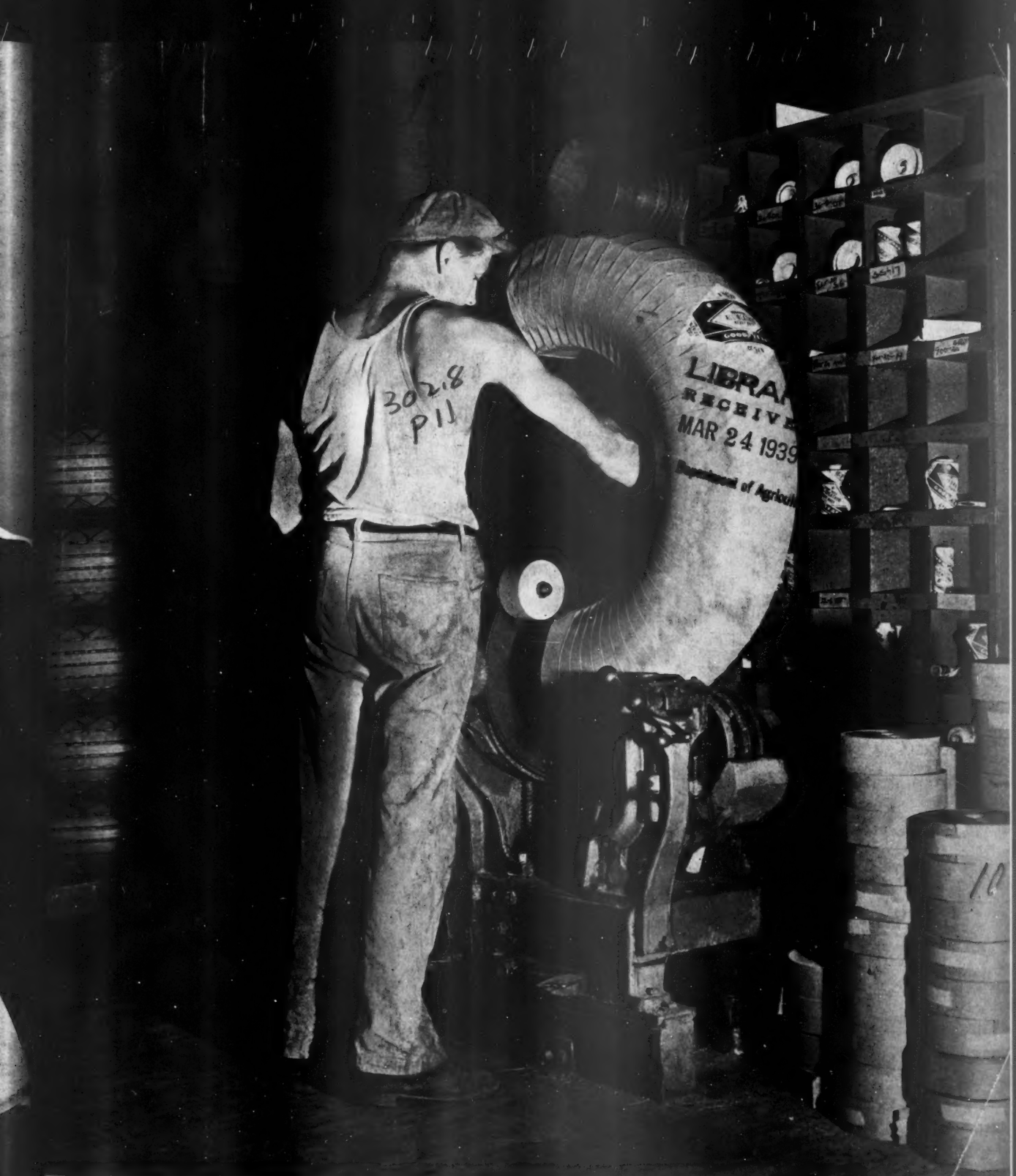
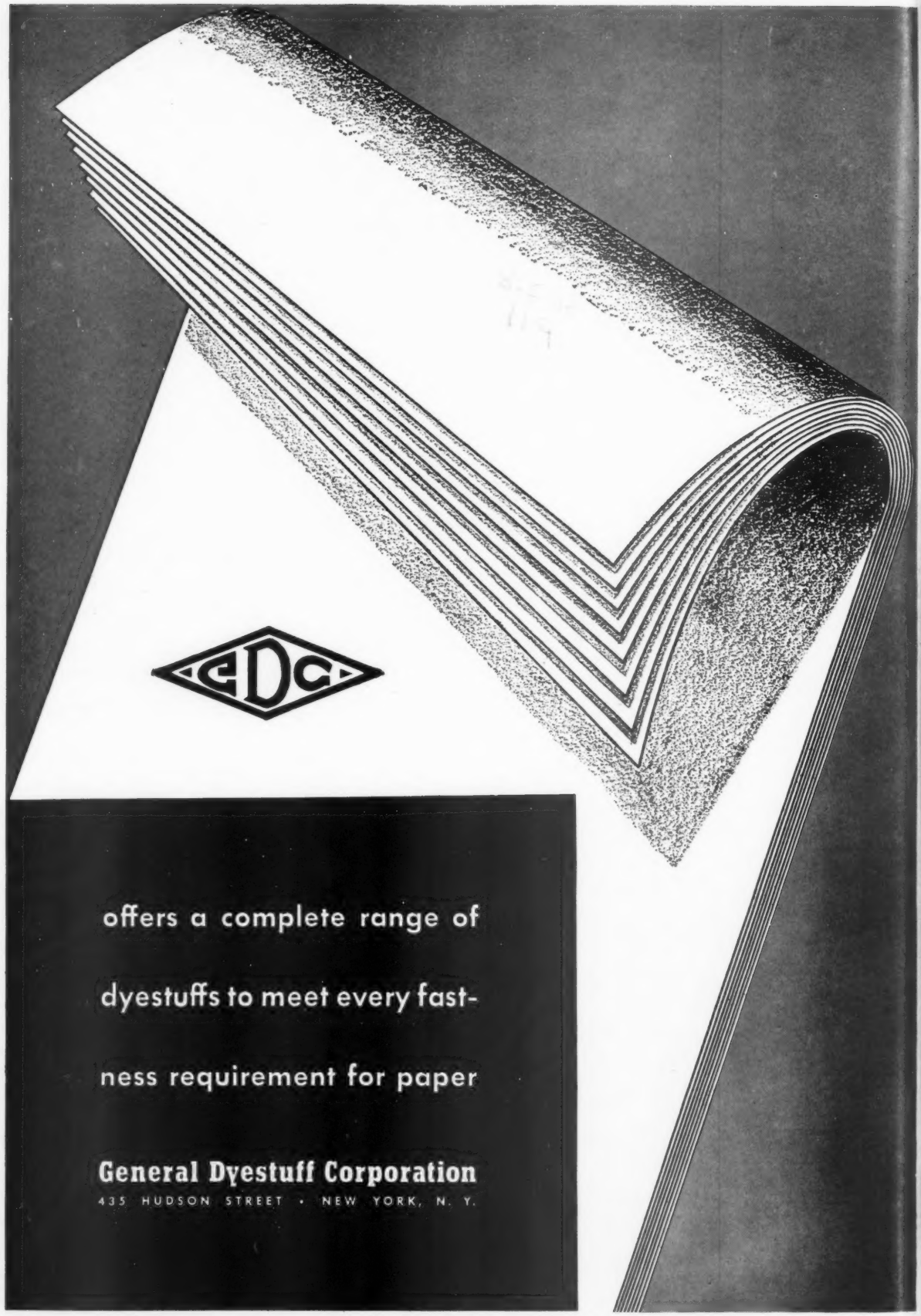


Pacific PULP & PAPER Industry

WRAPPING A TIRE in a Pacific Coast tire plant ✓ ✓ ✓ A 6.00x16 casing requires almost 200 feet of kraft tire wrap ✓ ✓ ✓ At capacity the Pacific Coast tire industry uses 255,000 miles of tire wrap annually.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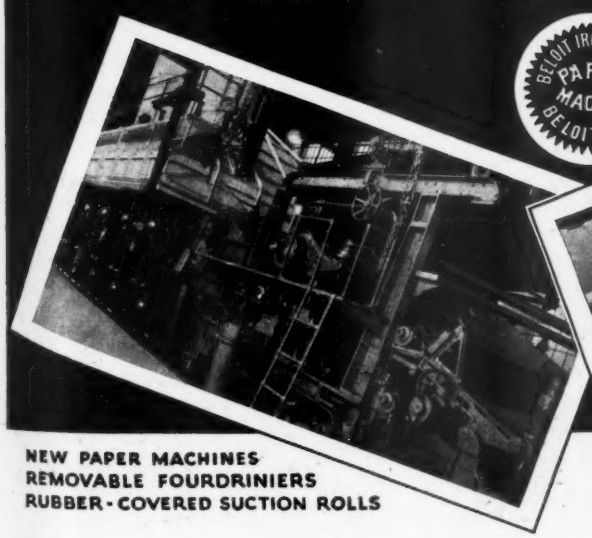
The PACIFIC COAST GOES BELOIT

MODERN BELOIT EQUIPMENT WILL BE FOUND IN PRACTICALLY EVERY MILL ON THE COAST

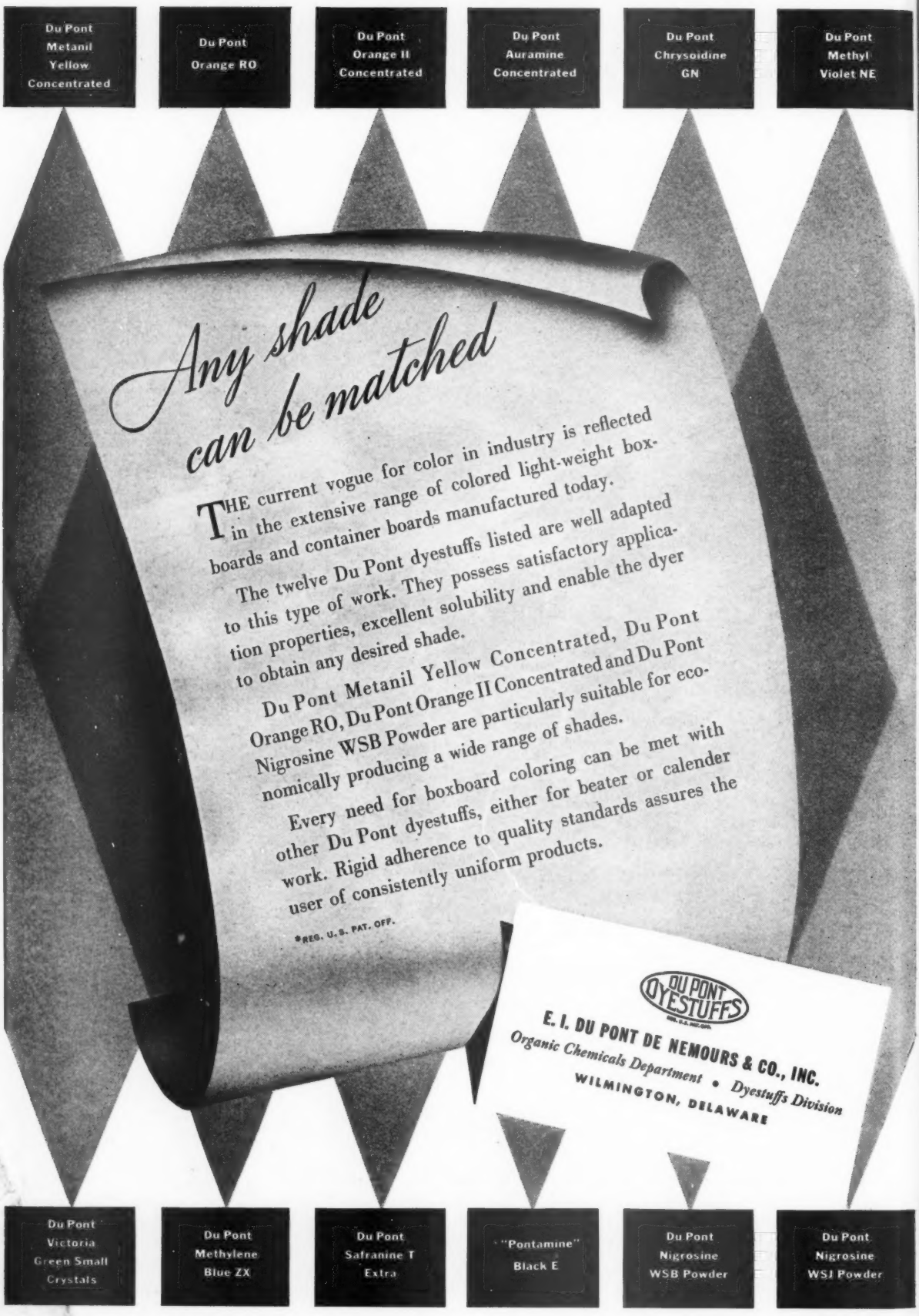
The Beloit Way is the Modern Way

BELOIT IRON WORKS PAPER MACH'Y BELOIT WIS.



NEW PAPER MACHINES
REMOVABLE FOURDRINIERS
RUBBER-COVERED SUCTION ROLLS

CHAIN DRYER DRIVES
HIGH-SPEED SUPER SHAKES
ENCLOSED HYPOID OR SPIRAL BEVEL GEAR DRIVES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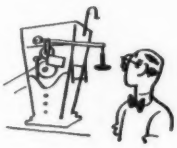
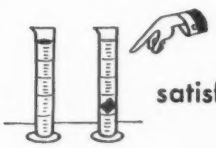
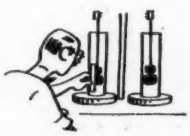
When you buy a Huyck Felt, you add to your staff a group of experts backed by 70 years of service to the paper  industry.

They study your equipment, your needs, your production problems. They design, especially for you, felts of just the right specifications for each job. And they continue to work, for you and *with* you, to provide in your mill continuous  satisfaction in felt performance. No wonder that with such service, Huyck Felts  are the choice of leading papermakers everywhere.

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Pacific PULP & PAPER Industry

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MARCH • 1939

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Plans Under Way for 1940 Seattle TAPPI Meeting

G. S. Brazeau Appointed General Chairman and Thomas J. Bannan Convention Manager for 1940 Fall Meeting of TAPPI

● Chairman of the Pacific Section of TAPPI, N. W. Coster, announced at the dinner meeting held in Seattle on March 7th, that the national executive committee, meeting in New York in February, had approved the appointment of G. S. Brazeau as general chairman of the national Fall meeting which will be held in Seattle late in August or early in September of 1940. Mr. Brazeau, who is manager of the Everett mill, Pulp Division, Weyerhaeuser Timber Company and a member of the national executive committee of TAPPI, has accepted the appointment, Mr. Coster said.

The national executive committee has also approved the appointment of Thomas J. Bannan of Seattle as convention manager, Mr. Coster announced. Mr. Bannan, a member of TAPPI, is vice-president of the Western Gear Works of Seattle and of the Pacific Gear & Tool Works of San Francisco and Los Angeles and a director of the Pacific National Bank of Seattle. Mr. Bannan, who accepted the appointment, has been in close touch with the pulp and paper industry on the Pacific Coast for the past ten years.

Mr. Brazeau, who lived in the East at the time of the 1934 Fall meeting in Portland, had charge of arrangements for the special train which brought a large crowd to the 1934 meeting, the first held on the Pacific Coast.

The general chairman and the convention manager will cooperate with the officers and executive committee of the Pacific Section and with the mill organizations in preparing plans to entertain an even larger number of visitors from the East and Middle West than attended the Portland meeting.

Already interest is high in the 1940 meeting according to Mr. Coster who attended the annual meeting of TAPPI in New York in February in his capacity as chairman of the Pacific Section. Eastern TAPPI members are anxious to visit the Coast again and a large number stated they were planning to attend, Mr. Coster said. The success of the 1934 meeting in Portland is still being talked about and that fact, coupled with the continued progress made by the industry on the West Coast, will bring many who did not make the journey to the previous

G. S. BRAZEAU, General Chairman, 1940 Fall TAPPI Meeting

THOMAS J. BANNAN, Convention Manager, 1940 Fall TAPPI Meeting.

meeting. Mr. Coster, who is technical director of the Soundview Pulp Company of Everett, returned from New York shortly before the Seattle dinner meeting.

Committee appointments will be made shortly and work begun on plans to provide an outstanding program for the 1940 meeting in Seattle both as to papers to be presented and as to the entertainment to be provided.

The decision to hold the 1940 Fall convention in Seattle was made by the national executive committee at the 1938 meeting in Green Bay, Wisconsin, last September.

Pulping Douglas Fir At the University of Washington

● L. C. Haffner, chemical engineer of Portland, Oregon, and Dr. Kenneth A. Kobe of the Department of Chemical Engineering of the University of Washington at Seattle, are working together on a sodium sulphite method of cooking Douglas fir in the department's pulp laboratory.

The series of experiments which began at the university in January will continue there through the month of March.

Dr. H. K. Benson is executive officer of the Department of Chemistry and Chemical Engineering.

Mrs. Ellis Passes In Shelton

● Mrs. J. G. E. Ellis, wife of "Jack" Ellis, resident engineer of the Shelton Division of Rayonier Incorporated, passed away in Shelton on Thursday, March 2nd.

Services were held in Seattle Saturday, March 4th, followed by burial in Washelli cemetery.

Pomona Modernizing No. 1 Fourdrinier

● Sometime during April the California Fruit Wrapping Mills of Pomona, California, will complete the modernization of No. 1 fourdrinier by the installation of new parts designed and manufactured by The Bagley & Sewall Company of Watertown, New York for whom Robert T. Petrie of Portland, Oregon, is Pacific Coast representative.

The equipment supplied by Bagley & Sewall includes new fourdrinier frames, including complete framework except breast roll stands and suction box frames; 22 new Duxbak table rolls (5½ inches outside diameter, 135 inch face with ¼ inch of rubber on steel tubes, and stainless steel journals); 44 eccentric type roller bearings in bronze mountings with vertical and horizontal adjustment; and five cast bronze suction boxes with maple tops of three strips, each 1½ inches wide with about 1 inch open between.

The new parts are designed to provide a corrosion proof fourdrinier. The frames are of welded structural steel zinc sprayed to prevent rusting, and the top rail is of bronze. The intermediate shake rail supports are of Westinghouse Micarta.

New Roofing Mill To Be Built in Portland

Will Produce Shingles, Roll Roofing, Felts and Building Papers, Roof Coatings and Asphalt — To Start Production Late in April

● Plans have been announced for the construction of a new roofing paper plant in Portland, by the Pacific Roofing Co. The new factory will produce a complete line of roofings, including shingles, roll roofings, felts and building papers, roof coating and asphalt.

The plant will be on N. W. Front and Balboa Streets, adjoining the Shell Oil Co. at Linnton. The building will be 50 by 250 feet in size, of heavy timber construction with corrugated iron walls and roof. Floors will be of reinforced concrete and there will be concrete foundations for the machinery.

The shingle cutting machine is being built complete in Chicago, and will be of the latest type for cutting shingles. The paper machine will be a 36-in. trim unit. Details of the plant will be published in Pacific Pulp & Paper Industry after it is completed.

The new company was recently incorporated for $80,000. A. E. Otis heads the concern as president; Thomas C. Young is vice president and general manager; H. H. Wade is secretary and treasurer.

Mr. Otis, a prominent Portland business man and financier, will take an active part in the new venture, returning to Portland from California, where he went several years ago to look after his southern holdings.

Mr. Young is well known on the Coast and throughout the roofing trade, having been in this business for 26 years. He has been connected with several of the large roofing manufacturing concerns, and has spent a number of years in this business in Portland.

Mr. Wade, formerly a Portland resident, is returning from Oakland to act as secretary and treasurer. He is a certified public accountant, and will be in charge of the office.

Humble to Be Superintendent

The plant superintendent will be Charles Humble, who has had wide experience in the roofing mill business. He was superintendent of a similar plant in Detroit, coming to the West about two years ago in a similar capacity in a local mill.

After the new factory is in production, which will be before the end of April, a warehouse 50 by 250 feet in size will be built along the railroad spur from the S. P. & S.

Present offices of the company are at 829 Terminal Sales Building, Portland.

M. A. Wertheimer Dies In New York City

● Monroe A. Wertheimer, chairman of the board of the Longview Fibre Company and of the Thilmany Pulp and Paper Company, died in New York City on March 1st, at 76 years.

His son, Robert S. Wertheimer, is general manager and treasurer of the Longview Fibre Company.

Mr. Wertheimer possessed an outstanding record as a successful organizer and operator of pulp and paper mills. The Appleton, Wisconsin, Post-Crescent of March 1st, made the following comments on Mr. Wertheimer's long career:

"He was president of the Thilmany Pulp and Paper Company from the time of its incorporation in 1901 until 1936 when he became board chairman.

"Under his leadership, the company grew from comparatively small beginnings to one of the largest specialty mills in the country, with eight paper machines, a 100-ton capacity kraft pulp mill, and converting departments equipped for the manufacturer of bags, waterproof papers, waxed and printed wrappers, and other items. The kraft mill was one of the first in the United States.

"Mr. Wertheimer organized the Longview Fibre Company in 1927. It is equipped with four paper and board machines, kraft pulp mill, and converting plants.

"He was born in Elyria, O., Feb. 2, 1863. He moved to California when he was a young man and entered the paper jobbing business in San Diego, supplying fruit wrappers to California growers. His chief source of supply was paper manufactured in Kaukauna by Oscar Thilmany.

"Mr. Thilmany decided to retire in 1901 and return to Germany, his fatherland. Mr. Wertheimer headed a group which purchased the Thilmany interests and the present company was organized.

"During the years that followed he became regarded as one of the outstanding men in his field, a leader in the development of new papers. He is credited with pioneering in this country lightweight strong papers to replace the heavy, coarse grades.

"Active in the civic and social life of

this community, he was a Lawrence College trustee for many years and was especially interested in the founding of the Institute of Paper Chemistry, serving as one of its first directors.

"Mr. Wertheimer was a charter member of the North Shore Golf club and the Riverview Country club. He was chairman of the committee which undertook the successful drive for funds to provide an addition for St. Elizabeth hospital.

"The first Mrs. Wertheimer was formerly Miss Annetta Salz of San Francisco, who died a number of years ago. Mr. Wertheimer was married in late 1935 to Mrs. Bess Frank of New York city, who survives him. A son, Robert S. Wertheimer, Longview, Wash., and three grandsons, also survive. A daughter, Mildred, died in May of 1937."

Superintendents to Meet In Washington, D. C.

● The 20th annual convention of the American Pulp & Paper Mill Superintendents Association will be held June 13, 14, 14th at the Wardman Park Hotel, Washington, D. C., according to the announcement by F. Leroy Zellers, president.

The regular exhibits of machinery and supplies will be staged again this year. The program includes a visit to the Government Printing Office which consumes fourteen carloads of paper per day; a visit to the Federal Bureau of Investigation; and, a cruise on the Potomac River Tuesday evening, June 13th.

Canadian Summarizes 1938 Pulp Situation

● At the annual meeting of the Canadian Pulp & Paper Manufacturers Association in Montreal January 25, 26, 27, F. G. Robinson, chairman of the Chemical Pulp Section, reported in part as follows:

"During 1938, contrary to experience over many years, the chemical pulp industry had to cope with dislocation of business not alone in one or two markets but in all markets. The shrinkage in consumption coincident with the recession of business in the United States during the latter months of 1937 was soon followed by almost entire cessation of shipments to Japan—a large consumer. Soon thereafter international unrest in Europe affected consumption adversely, first in Continental Europe and then in the United Kingdom.

"Some improvement in business began to show itself in the United States about mid-year, but in Japan, Europe and the United Kingdom conditions improved but little and continue unsatisfactory at the year end. When demand fell off towards the end of 1937 producers in North America promptly curtailed their operations to obviate the tying-up of liquid resources in unsaleable inventories of manufactured pulp; by this means such employment as consumption would support was spread over a longer period than would otherwise have been possible. The pursuance of this sound policy throughout 1938 contributed also to steadiness in the markets for those papers and paper products for which chemical pulp is the principal raw material.

● **"Unfortunately, this policy was not pursued by European producers, who persisted in continuing shipments to the United States at a rate in excess of current or prospective consumption. This led to speculation and trafficking that should not exist in the paper industry as to its basic raw materials. The evil effects of long-term price fixing and resulting speculation to which we have referred in our annual reports for several years past were demonstrated. The more orderly state of affairs in the chemical pulp industry as to competition from European producers, which seemed a possibility when our report was submitted last year, has not materialized.** (The emphasis is ours—Editor.)

"At the year end the industry was taken by surprise by the elimination of all customs duties on pulp of all kinds entering Canada from all producing countries of any importance, commencing January 1st, 1939. This results from the application of the terms of the new Canada-United States Trade Treaty to European countries having 'most-favored-nation' treaties with Canada, and creates many serious and widespread problems. There has not yet been opportunity to survey these problems fully and to determine what remedies should be applied; but these matters are being actively considered with a view to formulating action that will be in the best interests of the industry."

(For an outline of the course of action being taken by the Canadian Government, see pages 5 and 6 of the February number—Editor.)

John Acer Dies In Montreal

● John H. A. Acer of Montreal died suddenly of a heart attack at the Hotel St. Regis, in New York City, on February 25th. Mr. Acer was 62 years old.

He was president and a director of Acer, McLernon & Co., Ltd., pulp brokers; of the Dryden Paper Company, Ltd., of Montreal; of the Eastern Pulp Company of Canada, Ltd., and chairman of the board of the Tidewater Paper Mills Sales Corporation of New York.

Shipping Facilities Arranged From Sweden to Japan

● After negotiations of about a year's duration an agreement has been reached between Scandinavian and Japanese owners in regard to traffic between Norway, Sweden, Denmark and Japan. The ships of the Nippon Yusen Kaisha, engaged in traffic between Japan and Europe, will proceed direct to Scandinavian ports. If sufficient inducement offers. The new agreement has been occasioned by the increasing need for wood from Scandinavian countries by the Japanese paper industry. (Office of the American Commercial Attache, Copenhagen.)

Rayonier Reports Increased Third Quarter Profit

Net Profit for Third Quarter of Fiscal Year of $1,539,800 Counteracts First Quarter Loss and Brings Nine Months' Net to $1,421,431

● The report issued by Rayonier Incorporated, Pacific Coast manufacturer of dissolving pulps, for the third quarter of its fiscal year ending January 31st, 1939, showed a consolidated net profit of $1,539,800, equal to $2.46 per share on 626,205 shares of $2 cumulative preferred stock. This compares with a consolidated net profit of $64,895 or 10 cents a share for the preceding quarter, and with $731,692, or $1.17 a share for the January quarter of 1938. In the first quarter of its fiscal year Rayonier Incorporated reported a net loss of $183,264.

For the nine months ending January 31st, 1939, the corporation reported a consolidated net profit of $1,421,431, as compared with $2,758,587 earned by Rayonier and its predecessors combined in the corresponding period a year ago.

Sales of dissolving pulps for the three months ending January 31st, 1939, totaled 45,032 tons, compared with 13,859 tons in the preceding quarter. Shipments to Japanese customers, all made during the month of December, 1938, aggregated 28,000 tons.

In his report to stockholders President E. M. Mills said in part:

"Further orders from Japan have not been received at the date of this report, but conditions affecting the demand for dissolving pulps in that country would appear to justify the expectation of substantial further business duirng 1939."

Mr. Mills also told stockholders that reports indicate an improving sitiuation in the domestic rayon industry which, if sustained, should soon reflect an increased demand from this source for the company's dissolving pulps.

As of April 1st, 1939, accumulated unpaid dividends on the preferred stock will total $1.50 per share.

KRAFT TIRE WRAP made on the Pacific Coast protects Goodyear's casings from damage in storage and during shipping ' ' ' A part of the warehouse in the Goodyear Los Angeles tire and tube manufacturing plant.

California Tire Industry A Large Consumer of Coast Paper and Board

Four tire and tube plants in southern California when operating at capacity consume an estimated 8,300,000 pounds of paper and board annually – Paper and board wrapping and packing of tires and tubes provides protection against damage and assists in merchandising

TIRES, those indispensable shoes of modern transportation, require a large amount of paper and board in their packing and merchandising. For every tire produced by the large rubber plants nearly a pound of kraft paper and board is required.

Pacific Coast paper and board mills have in their own market area a large division of the United States tire and tube manufacturing industry with four plants in southern California. These have a total potential capacity of 9,000,000 tires and 8,000,000 tubes per year. On a full time operating basis this would provide a market for paper and board estimated at 8,300,000 pounds annually.

The production rate of tires and tubes reflects directly the activity in the automotive industry. During the past two years the manufacture of tires and tubes in southern California has been at approximately 60 per cent of capacity.

Paper and board products employed by the tire and tube industry are primarily for wrapping tires and tubes and for shipping containers. It was discovered by the tire industry some years ago that wrapping served two purposes; protected the product against damage and assisted materially in selling. The casings may be frequently exposed to the weather from the time they leave the factory until they reach the consumer. The tire wrap serves to keep sun and rain from the rubber as well as to provide protection against scoring, bruising and marring during transportation. The tire wrap also furnishes sales appeal, for the buyer cannot help but feel he is purchasing a factory-fresh tire that has been carefully protected from

damage up to the time he buys it.

In keeping with the mechanized efficiency achieved by the tire and tube manufacturing industry is the highly developed machine which wraps the casings. This ingenious device, pictured on the front cover, wraps the standard 6.00x16 casing in an average of .43 minutes. The casing revolves on rollers as a shuttle carrying the roll of paper runs rapidly around and through the casing on a track. This track is disconnected when the operator removes the wrapped tire and puts an unwrapped tire in place. The rotation of the casing is synchronized with the shuttle to maintain an even overlapping of the kraft tape.

At .43 minutes to the 6.00x16 casing an operator can wrap from 900 to 1,000 tires in an eight hour shift depending upon his own efficiency in operating the machine. The tire plants operate on a 24-hour basis, some employing four 6-hour shifts, others three 8-hour shifts, which makes it possible for each tire wrapping machine to wrap from 2,700 to 3,000 casings in 24 hours. These figures do not apply to all sizes such as the huge bus and truck tires which require more than .43 of a minute to wrap.

255,000 Miles of Tire Wrap

Close to 200 feet of 2½-inch kraft tire wrap are required to wrap a 6.00x16 casing. A standard roll will wrap on an average two and one-third casings of this size. Capacity operation by the four southern California tire making plants would require 3 million rolls per year. (For the Believe It or Not fans, the 3 million rolls would be equivalent to 1,350,000,000,000 feet or 255,000 miles).

● Largest of the southern California tires and tube producing plants is the Goodyear Tire & Rubber Company's factory at 6701 South Central Avenue in Los Angeles. This modern manufacturing unit has an estimated productive capacity of three million casings annually and can account for one-third of the total Pacific Coast production.

The types of paper and board used by Goodyear fall into three general classes: kraft for tire wraps, waxed kraft for tube wraps, and board for tube cartons and shipping containers.

Goodyear employs five different tire wraps to identify the several qualities of casings. The new YKL rayon fabric tire made with Rayotwist cord is wrapped in maroon kraft to distinguish it from the cotton fabric casings. Light brown kraft wrap is used to identify Goodyear's standard first line tire; blue kraft designates the Marathon, Goodyear's competition tire; and marbled black kraft wrapping is applied to the Double Eagle tire, Goodyear's highest quality cotton fabric casing.

Tires destined for export are double wrapped to protect them from the extremes of climate and against severe treatment which they may experience in being loaded onto and off ships and after they arrive at their foreign destination. The second outer wrap is of brown kraft laminated with asphalt and sisal fibre.

Specifications for the maroon, blue and brown tire wraps are: tensile 47 pounds, Mullen 60, tear for width 8½ pounds. The marbled black wrapping must have a tensile of 50 pounds, a Mullen of 65, and a tear for width of 9 pounds. The tire wrap comes in rolls 2½ inches in width.

Two different sizes of waxed kraft sheets are used for wrapping the tubes. The specifications call for a 20-pound kraft waxed to 25 pounds the 20x28-inch size, and 30 pounds for the 24x36-inch size. The waxed sheets must be greaseless, odorless and have a wax melting point of from 133 to 136 degrees Fahrenheit. A variation of plus or minus 5 per cent is permitted.

Passenger car tubes are wrapped in the waxed kraft and packed in individual chip board cartons as shown in the photographs. Six of these cartons are packed in a corrugated fiber shipping container and sealed with gummed kraft tape.

Large tubes for bus and truck casings are wrapped in waxed kraft and packed directly into individual corrugated fiber shipping cases.

The gummed kraft tape used in sealing the containers comes in two

WRAPPING TUBES IN WAXED KRAFT before packing in individual cartons in the Goodyear Tire & Rubber Company's tire and tube manufacturing plant in Los Angeles.

widths, 1½ inches and 2 inches. The 1½-inch tape must be 35-pound kraft, mf or mg finish; and the 2-inch kraft must be 40-pound basis mf or mg finish. The adhesion test specification is 76. Otherwise the specifications are the same as those for the tire wrap. The 1½-inch tape comes in 800-foot rolls and the 2-inch tape in 600-foot rolls.

The tube cartons are of 3-ply, solid fiber .025 board, bleached sulphite liner on one side. These are printed in Goodyear's colors, blue and gold.

● It is estimated that the total annual purchases of paper and board by the four southern California tire and tube plants, Goodyear, Firestone Tire & Rubber Company of California, B. F. Goodrich Company, and the Samson Tire & Rubber Company (affiliate of the United States Rubber Company), would approximate 2,600,000 pounds of tire wrap kraft or 31½ per cent of the poundage total; 4,150,000 pounds or 50 per cent of corrugated and solid fiber board; 1,460,000 pounds or 17½ per cent of chip board for tube cartons; and 83,000 pounds or 1 per cent of waxed kraft for tube wraps.

The total estimated consumption is 8,300,000 pounds of paper and board per year or 4,150 tons.

Goodyear Buys Coast Paper and Board

The southern California tire and tube factories are heavy buyers of paper and board made on the Pacific Coast. The Goodyear Tire & Rubber Company buys its kraft paper through the Zellerbach Paper Company and Blake, Moffitt & Towne, and its board from Fibreboard Products, Incorporated and the Pioneer Division of The Flintkote Company. Cartons are produced by the Standard Paper Box Company of Los Angeles. These are Goodyear's current sources of supply. The corrugated straw board is made at the Antioch, California, mill of Fibreboard Products, Incorporated, and cartons and containers are produced at the Vernon and South Gate plants of the same company.

Asks Development of Pulp Industry in Alaska

● A memorial to the U. S. Department of Agriculture asking that a plan be drafted and promoted for the early development of Southeastern Alaska's great pulp and paper timber resources was recently introduced in the Territorial Legislature by representative James V. Davis.

Puget Sound Reports Small Loss for 1938

But December Operations Resulted In a Net Profit of $25,801 After Depreciation

● Preliminary report of Puget Sound Pulp & Timber Co. and subsidiary for the year ending December 31st, 1938, shows a consolidated net loss of $10,606 after depreciation, obsolescence and interest, contrasted with a net profit of $271,143 on the same basis for the preceding year, equal to 78 cents a share on 251,836 shares of common stock after allowing for regular preferred dividends on preferred stock sold in 1937. In 1936 the company reported a net profit of $8,827, and a net loss of $4,346 in 1935. Independently audited report of the company for 1937, released in April of last year, showed a net profit of $254,998 for 1937.

Reflecting reduced business activity, net sales and railway operating revenue of the company amounted to $1,819,425 last year, compared with $3,042,819 in 1937, a drop of $1,223,394 in gross income, or 40.2 per cent.

December Profit Shown

Indicating a better trend in operations recently, December showed a profit of $50,868 before depreciation, and a net operating profit of $25,801 after depreciation.

The Bellingham pulp division was the only unit of the company which operated in 1938. The Anacortes pulp division, the Clear Lake logging division, and the Puget Sound Cascade Railway remained idle all through the year with the exception of a small contract for logging operations and some switching service on the railroad. The Bellingham pulp division was also shut down in May and June of last year.

An additional factor in reducing the company profits during the year just ended was the inability of the company to make shipments on large Japanese contracts during 1938 due to reduction of pulp imports by the Japanese government. This turned an anticipated large profit for the Anacortes division into a substantial loss, and seriously affected the earnings of the Bellingham division.

Pulp prices in the domestic market showed a sharp decline during the year. The market price on dock at Atlantic Coast ports at the start of 1937 was $45 a ton, while the price at year-end was $37, a drop of $8, or 17.77 per cent.

Capital expenditures for the new plant exceeded the proceeds from the sale of preferred stock of the company by $266,548. This amount includes the expenses incurred in connection with the registration and sale of the stock amounting to $59,628. An additional $37,024 was expended for capital improvements on the old plant which includes the cost of enlarging and improvements to the old office building.

During the year, Puget Sound Pulp & Timber Co. succeeded in effecting a very substantial reduction in pulp inventories. This item stood at 6,688 tons on December 31, 1937. By last year-end the inventory totaled 3,932 tons, representing a reduction of 2,756 tons, or 41.2 per cent.

Conolidated balance sheet of the company as of December 31, 1938, shows current assets, including cash of $200,944, of $543,626, compared with current liabilities of $460,474. Inventories at lower of cost or market stood at $245,293 at year-end.

TAPPI and Superintendents to Meet In Tacoma, June 2nd and 3rd

The joint Spring meeting of the Pacific Coast Division of the American Pulp & Paper Mill Superintendents Association and the Pacific Section of TAPPI, will be held at the Hotel Winthrop in Tacoma on June 2nd and 3rd.

Niles Anderson, Assistant Superintendent of the St. Regis Kraft Company, Tacoma, has been appointed General Chairman of the joint meeting.

Coast Paper Mills Did Well in 1938

Despite Higher Costs Due to Lower Volume

• The recently released 1938 earnings reports of three Pacific Coast paper manufacturers, Crown Zellerbach Corporation, Hawley Pulp & Paper Company and the St. Helens Pulp & Paper Company, show good progress during a year of declining volume and rising costs.

Crown Zellerbach Corporation for the nine months of the fiscal year ending January 31st, reported net earnings of $1,145,775 as compared with $806,064 in the third quarter of the 1938 fiscal year.

For nine months Crown Zellerbach showed a consolidated net profit of $3,484,383 after depreciation, depletion, interest and provision for income taxes and minority stockholders' interest. This is equivalent, after deducting full dividend requirements on the new $5 cumulative convertible preferred stock for the period, to 66 cents a share on the 2,261,199 shares of common stock outstanding. This is less than half the net per share earned in the same nine months of the preceding year when a consolidated net profit of $5,246,865 was reported. This was equivalent, on the same basis as the 1939 nine months report, of $1.44 per common share.

Sales for the nine months just ended totaled $36,140,516, compared with $38,799,203 in the nine months of the 1938 fiscal year, a decrease of $2,658,687 or 6.85 per cent.

Consolidated income account of Crown Zellerbach Corporation and subsidiaries for the nine months ending January 31, 1939, compares with adjusted figures in the preceding fiscal years as follows:

	1939	1938	1937
Net sales	$36,140,516	$38,799,203	$33,376,286
Cost of goods sold	24,650,977	25,342,558	22,175,533
Profit on sales	$11,489,539	$13,456,645	$11,200,753
Operating expenses	4,467,356	4,491,214	4,169,124
Operating income	$7,022,183	$8,965,431	$7,031,629
*Other income (net)	819,830	965,936	1,035,774
Total income before price changes	$7,842,013	$9,931,367	$8,067,403
Depreciation	2,435,435	2,462,939	2,403,083
Depletion	338,507	506,314	423,516
Interest	651,346	683,657	797,850
Other expenses net of other income	92,814		
Minority interest	30,533	50,809	36,383
U. S. and Canadian income taxes	808,995	980,793	645,813
Net profit	$3,484,383	$5,246,865	$3,760,758

*Includes Crown Zellerbach's net equity in the consolidated net profit of Fibreboard Products, Inc., which is 50 per cent controlled by Crown in 1937 and 1938, also some "other operating profit" is included in those years. In 1939, the amount represents only the dividends received from Fibreboard.

While reduced sales volume was one reason for the lower net profit shown during the nine months of the 1939 fiscal year another was a change in policy wherein only the dividends actually received from the corporation's interest in Fibreboard Products, Incorporated, were credited to earnings. In the past the net equity in the Fibreboard earnings was applied.

Directors of Crown Zellerbach Corporation on February 23rd declared a dividend of 12½ cents a share on the common stock, payable April 1st to stock of record March 13th. It was stated that the current declaration is to be considered as an interim payment and not as placing the stock on a regular dividend basis. The company paid a similar dividend on January 3rd.

• **Hawley Pulp & Paper Company** reports a net profit for 1938 of $87,801 after all charges compared with a net profit of $145,432 in 1937 and a net loss of $35,247 in 1936.

Directors authorized payment of 4 per cent interest accumulated during 1938 on the company's 6 per cent first mortgage sinking fund bonds, and also accepted tenders of $132,500 face value bonds at offered price of $138,187, equal to $104.29 flat. After retirement of these bonds there remains outstanding $783,000 face value as compared with $915,500 on December 31, 1938, and $1,100,000 at the close of 1937.

• **St. Helens Pulp & Paper Company** reported a net profit of $316,970.45 for the year ending December 31st, 1938. The directors voted a 20 cents share dividend on the common stock, payable March 1st.

Total current assets of the St. Helens Pulp & Paper Company were reported to be $1,035,330.58 as of December 31st, 1938, and total assets as of that date were $3,806,488.31.

Total current liabilities were listed as $287,806.21. Of the authorized issue of 210,000 shares of common stock of $10 par value, a total of 199,934 shares have been issued and are now outstanding. None of the $7 cumulative preferred stock, par value $100, listed at $1,000,000 has been issued.

At the company's annual meeting in Portland on February 21st, Max Oberdorfer was reelected president and general manager, Dr. Robert Ellis was reelected vice-president and Irving T. Rau was reelected secretary-treasurer. All members of the board of directors were reelected for another year. They are: Max Oberdorfer, Dr. Robert Ellis, E. S. Collins, Edgar H. Sensenich, Thomas Autzen, Harry T. Nicolai, C. G. Blagen, Phil Mteschan and Dr. J. A. Reuter.

The 1938 earnings were equivalent to $1.59 per common share on 199,934 shares outstanding while in 1937 the company made $353,362 net profit or $1.77 per share.

Dividend payments were revised downward last year, totaling $1 per share, compared with $1.20 in 1937 and $1.40 in 1936. The company's financial position was improved with cash of $166,008 out of total current assets of $1,035,330.58, against current liabilities of $287,806. At the end of 1937 current assets totaled $873,628 including cash of $46,124, while current liabilities amounted to $275,980.

Working capital at the end of 1938 stood at $747,524 against $597,600 a year ago, and $703,000 at the end of 1936. Inventories were reduced slightly, amounting to $599,210 on December 31st last compared with $643,338 on the like date in 1937.

Following is the condensed income account of the St. Helens Pulp & Paper Company for the year ended December 31st, 1938, compared with 1937 and 1936:

	1938	1937	1936
Total income before price changes	$592,814	$645,646	$556,187
Depreciation	184,873	183,213	191,958
Interest	276	2,479	7,993
Federal income and state taxes	90,695	115,592	70,114
Net profit	**$316,970**	**$353,362**	**$286,122**

The balance sheet of the St. Helens Pulp & Paper Company as of Deecmber 31st, 1938, compares as follows with those of 1937 and 1936:

ASSETS

	1938	1937	1936
Cash	$ 166,008	$ 46,124	$ 142,626
Notes and accounts receivable (net)	270,112	184,116	333,253
Inventory	599,210	643,338	457,908
Total current assets	**$1,035,330**	$ 873,628	$ 933,787
Cash value insurance policies	55,461	42,082	40,124
Plant and equipment, net	2,679,317	2,723,721	2,653,718
Deferred items	36,380	32,194	20,259
Total assets	**$3,806,488**	**$3,677,625**	**$3,647,888**

LIABILITIES

Accounts payable	$136,485	$108,623	$119,059
Accrued wages	29,708	21,123	4,248
Taxes accrued	121,413	146,234	107,394
Total current liabilities	**$287,806**	**$275,980**	**$230,701**
Bank loans			175,000
Capital stock ($10 par)	1,999,340	1,999,340	1,999,340
Capital surplus	1,031	1,031	1,031
Earned surplus	1,518,311	1,401,274	1,241,816
Total liabilities	**$3,806,488**	**$3,677,625**	**$3,647,888**

Financial Reports

● **Brunswick Pulp & Paper Company** reported net earnings of $58,660 for the six months ending December 31, 1939, as compared with $47,700 earned in the period from February 27, 1938, to June 30, 1938. Brunswick manufactures bleached sulphate pulp at Brunswick, Georgia, and is owned jointly by the Scott Paper Company and the Mead Corporation.

● **West Virginia Pulp & Paper Company** reported a net profit of $451,276 for the year ending December 31, 1938, after depreciation, depletion, interest and federal income tax. This is equivalent to $2.89 a share (par 100) on 155,830 shares of 6 per cent preferred.

For the fiscal year ended October 31, 1938, West Virginia made a net profit of $260,353, or $1.67 a share on the preferred.

For the first quarter of West Virginia's fiscal year, which started November 1st and ended January 31st, the company reported a net profit of $389,164.

● **United Paperboard Company, Incorporated,** and subsidiaries, reported for the six months ending November 26, 1938, a net loss of $374, after depreciation and federal income taxes. This compares with a net profit of $63,011, equal to 10 cents a common share, for the six months ending November 27, 1937.

For the quarter ended November 26, 1938, indicated net loss was $13,875, against net profit of $21,277, or 1 cent a common share, in the November quarter of 1937, and net profit of $13,501, or $1.04 a share on the 6 per cent preferred for the quarter ended August 27, 1938.

● **The Container Corporation of America** reports for the quarter ended December 31, 1938, a net profit of $133,576 after charges and taxes, equivalent to 17 cents a share on the 781,253 shares of common stock outstanding. This compares with $38,349, or 5 cents a share in the fourth quarter of 1937 and a loss of $104,106 in the quarter ended September 30, 1938. For the year 1938 earnings totaled $29,470, or 4 cents a share, against $1,784,105, or $2.28 a share in the 1937 year.

● **National Container Corporation** reports for the quarter ended December 31st, last, net profit of $24,582, after taxes and charges, equivalent to 7 cents a share on the 330,482 shares of capital stock outstanding. This compares with a profit of $47,021 in the preceding quarter, or 14 cents a share, and a loss of $49,967 in the final quarter of 1937.

For the year 1938 profit totaled $125,903, or 38 cents a share, against a profit of $311,931, or 94 cents a share, in the 1937 year.

● **The Rhinelander Paper Company** reports for 1938 a net income of $118,140, equal to 79 cents each on the 150,000 capital shares, compared with $240,293, or $1.60 per share, in 1937.

● **The Scott Paper Company** of Chester, Pennsylvania, reports for 1938 a net profit of $1,379,950, or $2.30 a common share. This compares with a net profit of $1,254,281, or $2.09 a share, for 1937.

● **The Eddy Paper Corporation** of Three Rivers, Michigan, and Winchester, Virginia, reports a 1938 net profit of $212,336, equal to $1.14 each on 185,048 shares of common stock, compared with net profit of $649,937, or $3.65 each on 178,000 shares in 1937.

● **The P. H. Glatfelter Company,** paper manufacturers of Spring Grove, Pennsylvania, reports a net profit of $110,560 for 1938, compared with $221,216 earned in 1937.

● **The S. D. Warren Company** reports for 1938 a net profit of $164,364, equal to $1.62 each on 101,387 capital shares, compared with $604,748, or $5.96 a share in 1937.

● **The Detroit Paper Products Corporation** reports for 1938 a net loss of $161,605 as compared with a net income of $111,401 in 1937.

Great Northern Releases Good Statement

● The Great Northern Paper Company, one of the largest producers of newsprint with mills at East Millinocket and at Madison, Maine, completed a satisfactory year in 1938 despite the decline in newsprint consumption and a continued low price.

According to the statement released by William H. Whitcomb, president, the net earnings for 1938 were $2.17 per share of common stock as compared with $2.18 per share in 1937. Great Northern has no preferred stock, no bonds, no debentures, no notes, no bank loans.

The successful operation of the Great Northern Paper Company is of interest to the entire industry as it is considered to be an exceptionally well managed organization.

At the close of 1938 Great Northern had current assets of $14,174,000, of which $5,118,048 was in cash, against current liabilities of $1,070,260. The company's total assets at the end of 1938 were $43,264,619. The value of the $998,330 shares of common stock issued are worth $24,958,250 and the earned surplus is listed at $16,259,613.

Second Stock-Maker For Pomona

● The California Fruit Wrapping Mills of Pomona, California, manufacturers of fruit wrap and other tissues, have recently ordered a second Morden Stock-Maker.

The first Stock-Maker was installed last summer. The refiner is manufactured by the Morden Machines Company of Portland of which C. W. Morden is president.

Modernized Boiler Design Solves Mill's Steam Problem

The Oregon Pulp & Paper Company of Salem, Oregon, rebuilt No. 5 boiler to the latest design—Now produces 50,000 pounds of steam per hour on hogged fuel against original production of 25,000 pounds on hogged fuel and oil

by NILS G. TEREN*

KEEPING steam production in balance with plant operation is a problem which presents itself to plant operators throughout the industrial field. By this I mean that a plant will be designed and built for a given performance and may operate with entire success for a considerable period. However, sooner or later, as sure as death and taxation, there will be additions and changes made in operating methods and production, which will necessitate more steam. This need is taken care of by the operating engineers until a limit of the resources available are reached; then the entire plant begins to slow down due to insufficient pressure and temperature.

One solution at this point lies in the purchase and installation of additional boiler power. This naturally entails a large expense not only for the boiler itself and brickwork, but for connections, instruments, etc., all of which are required for a successful boiler installation. In our plant, we have had all of the above experiences, including the addition of another boiler, this boiler being No. 5 and increasing our rated boiler capacity to 2450.

The installation of boiler No. 5 was made in April, 1930, and proved satisfactory in regard to steam production for a period of approximately six years, when the plant again started to outgrow our boiler capacity.

During this period we had been able to maintain steam production by burning oil in addition to our regular fuel (hogged fuel). However, as conditions changed, we were having more and more difficulty maintaining pressure even though burning upwards of one hundred barrels of oil per day, and now were faced with the problem of installing boiler No. 6. Owing to the location of buildings and space available, the addition of this boiler would have been an extremely expensive arrangement.

● We finally solved this problem in a different manner. In other words, we became convinced that the steaming capacity of a boiler installation is not limited to any definite figure, even though fired with hogged fuel, and that with proper furnace and draft regulation, the average boiler plant can be made to produce a great deal more steam than was considered possible a few years ago.

Shown in Figure 1 is the arrangement of No. 5 boiler setting as it was originally installed. This boiler is a 5000 sq. ft. Stirling and produced, with the aid of oil firing, around 25,000 lbs. of steam per hour. We call your attention to the extremely deep combustion chamber with oil burning installation in back wall. You will note the boiler front coming up to and partially beneath the front steam drum. You will also note the drop nose arch in relation to the bridge wall. This entire arrangement which was and even today is considered good practice, squeezed down combustion space to a degree which left for active steam production only the lower half of tubes which were exposed to the furnace. It is readily seen that this arrangement is not conducive to full boiler steaming capacity.

NILS G. TEREN
Describes Boiler Modernization at Salem mill

Figure 2 shows the same boiler as re-set and in operation today. You will notice the absence of deep combustion chamber, also that the drop nose arch has been changed to straight nose, and that the boiler front has been moved outward from the upper steam drum approximately three feet, thereby increasing combustion space to 2106 cubic feet. In addition to these changes, observe the gas tight fire and ash pit doors; also the installation of high speed turbine blowers which provide both primary and secondary air. You will note that primary air is taken into the ash pit beneath the grate bars and that secondary air passes through nozzles in the end of the arch and is driven downward, forming a curtain of air through which gases from Dutch oven must flow. You will also note in the furnace arrangement, air ports in the side walls and also in the center pier which divides the furnace into two parts. Air driven through these ports under pressure passes horizontally into the fuel bed, instead of vertically through the grate bars as in the old type furnace. This design is technically known as a producer gas type furnace, for the reason that the Dutch oven is for the sole purpose of changing fuel from a solid to a gaseous state, and that practically all of the burning action takes place in the combustion chamber back of the bridge wall.

*Vice-President and Manager of the Oregon Pulp & Paper Company, Salem, Oregon.

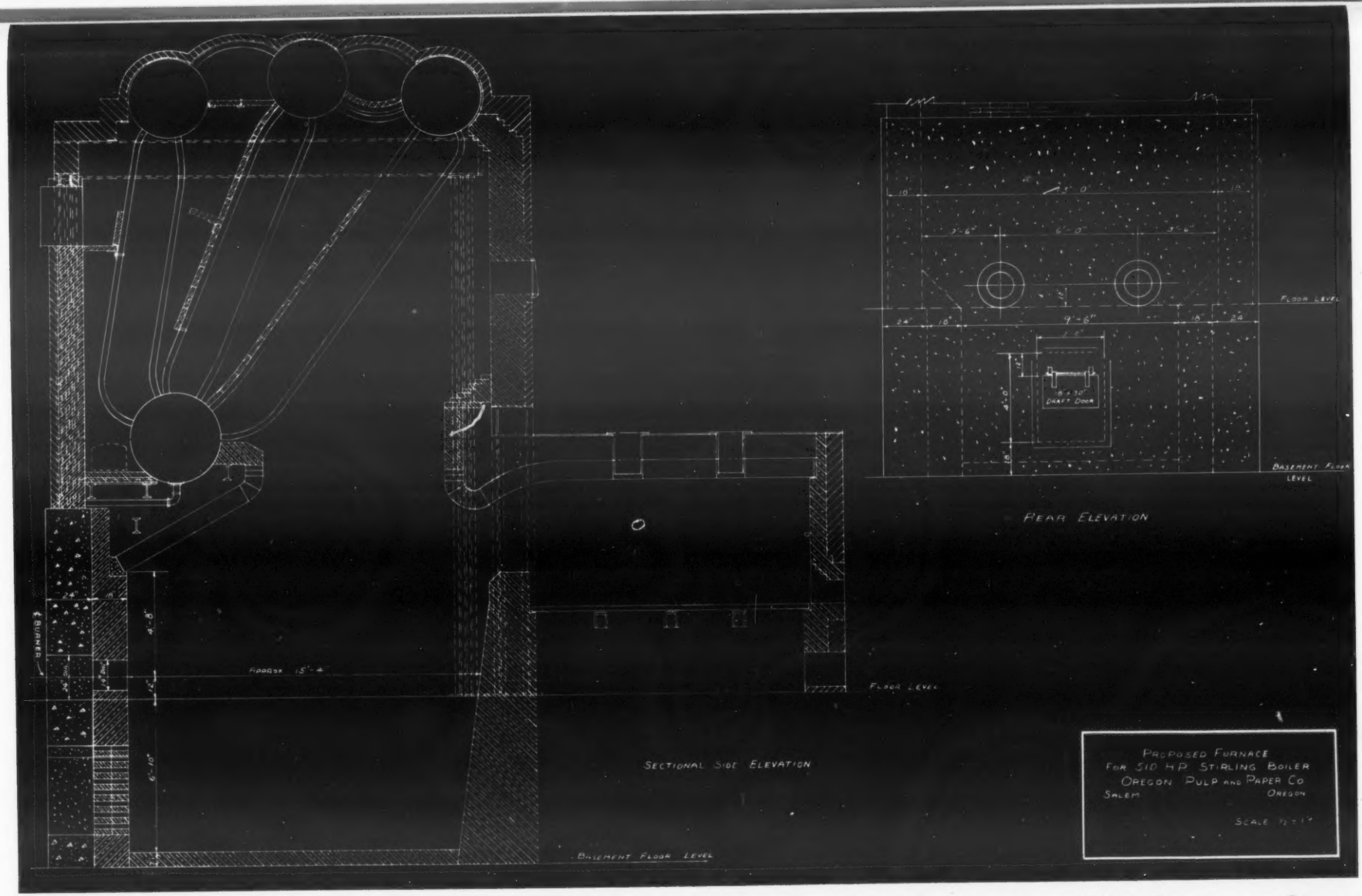

FIGURE 1. Arrangement of No. 5 boiler as it was originally installed in 1930 by the Oregon Pulp & Paper Company of Salem, Oregon ' ' ' Compare with redesign as shown in Figure 2.

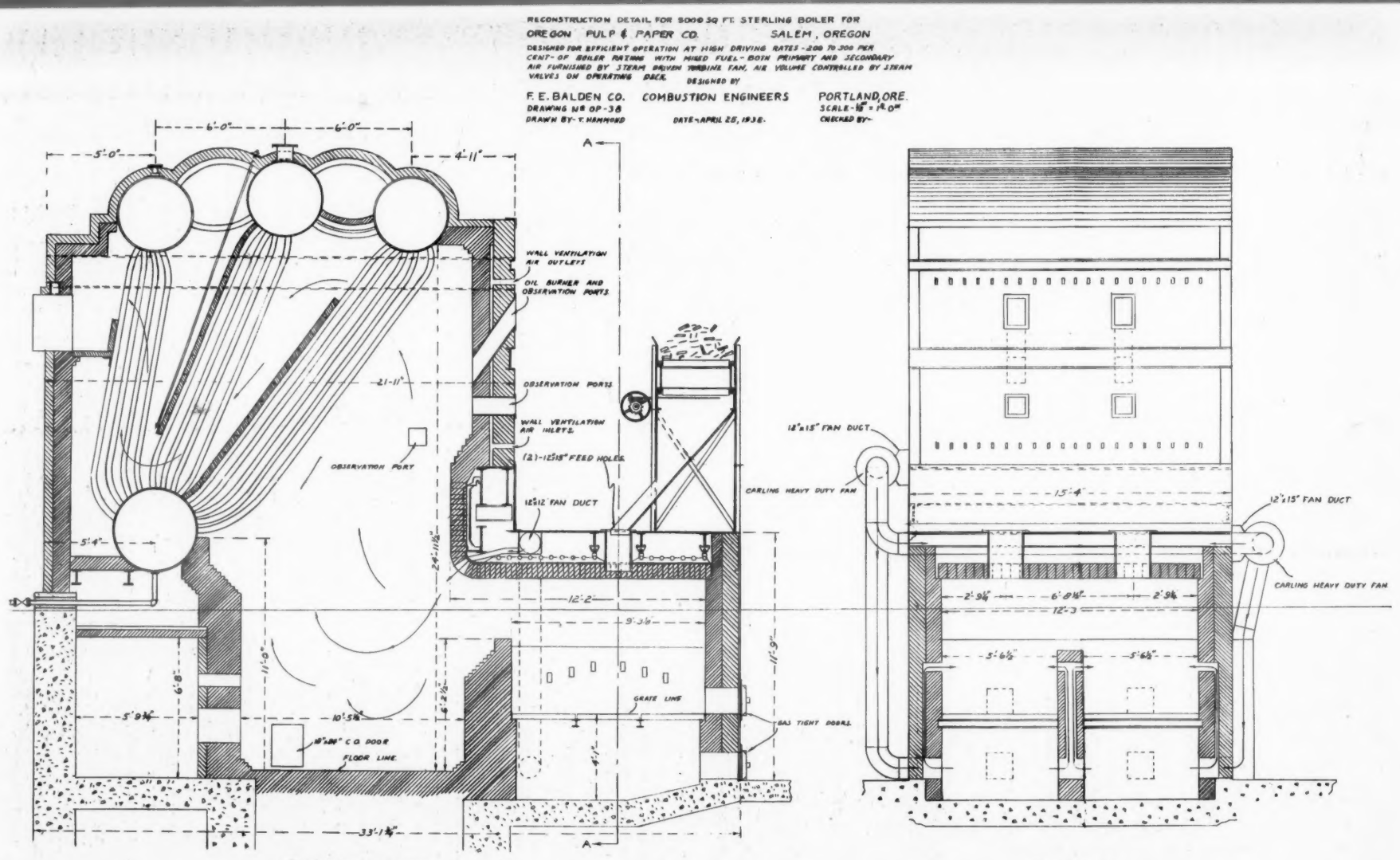
RECONSTRUCTION DETAIL FOR 5000 SQ FT STERLING BOILER FOR
OREGON PULP & PAPER CO. SALEM, OREGON
DESIGNED FOR EFFICIENT OPERATION AT HIGH DRIVING RATES - 200 TO 300 PER CENT - OF BOILER RATING WITH MIXED FUEL - BOTH PRIMARY AND SECONDARY AIR FURNISHED BY STEAM DRIVEN TURBINE FAN, AIR VOLUME CONTROLLED BY STEAM VALVES ON OPERATING DECK.
DESIGNED BY
F. E. BALDEN CO. COMBUSTION ENGINEERS PORTLAND, ORE.
DRAWING NR OP-38
DRAWN BY- T. HAMMOND
DATE - APRIL 28, 1938.
SCALE - 1/8" = 1'-0"
CHECKED BY-
WALL VENTILATION AIR OUTLETS
OIL BURNER AND OBSERVATION PORTS
OBSERVATION PORTS
WALL VENTILATION AIR INLETS.
(2)-12"x18" FEED HOLES
OBSERVATION PORT
12"x12" FAN DUCT
GRATE LINE
GAS TIGHT DOORS
FLOOR LINE
LONGITUDINAL SECTION
12"x15" FAN DUCT
CARLING HEAVY DUTY FAN
SECTION A-A.

FIGURE 2. Layout of the modernized design of No. 5 boiler at the Oregon Pulp & Paper Company's bleached sulphite pulp and paper mill at Salem, Oregon, as completed in the Spring of 1938 ' ' ' Compare with the original design shown in Figure 1.

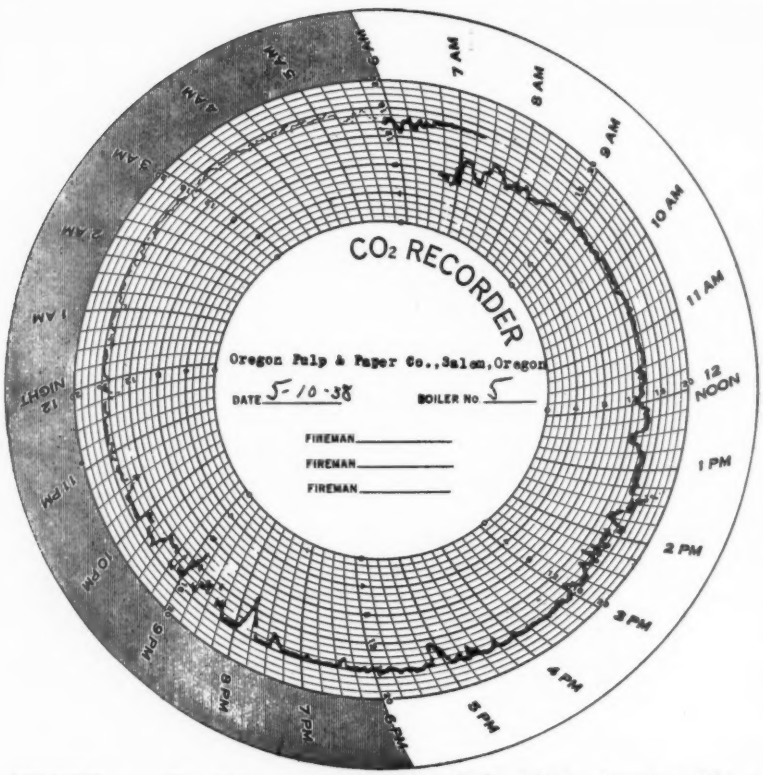

FIGURE 3. The CO_2 record for May 10th, 1938, showing CO_2 at times in excess of 16%.

● The boiler performance of this new furnace arrangement has proven so remarkable that many checks and records have been made, one of which is as follows:

Evaporation: 40,000 lbs. per hour.
Boiler rating: 250% (Coef. of evap. 32)
Stack temperature: 520° F.
Combustion chamber, lower side: 2100° F.
Combustion chamber, upper front: 2100° F.
Combustion chamber (top) front of tubes: 1400° F.
Stack draft, open damper: 1.2 inch (at 520°)
Stack draft used in firing: 0.4 inch.
CO_2 readings: 14% to 15½%
Primary air to ash pit 1½-in. static pressure
Secondary air to combustion chamber 1-in. static press.
Samples of fuel taken during this day's operation showed an average of 46% moisture.

During one twenty-four hour period on May 10, 1938, this boiler produced 972,000 lbs. of steam, which is an average of 81 lbs. of steam per rated h.p. per hour, or 8.1 lbs. of steam per square foot of boiler heating surface. This is an over-all average of 253% of boiler rating. In order to maintain this average for twenty-four hours, it was necessary at times to drive this boiler beyond 50,000 lbs. of steam per hour, which would be in excess of 312% rating. The CO_2 chart (Figure 3) for this date shows CO_2 at times in excess of 16%.

This boiler has produced on other days as high as 980,000 lbs. of steam and is capable of producing 1,000,000 lbs. or more in 24 hours. We have not been obliged to burn oil since installation of this furnace. We are satisfied that with the installation of succeeding furnaces of this type, we have ample boiler capacity for stepping up our steam production at least another 1,000,000 lbs. in 24 hours, which should take care of plant expansion and increases in production for several years.

Harry Hooker a Coast Visitor

● Harry M. Hooker, president of the Hooker Electrochemical Company of New York City, was a Coast visitor late in February and early in March, calling on pulp and paper mill customers and Albert H. Hooker, Jr., of Tacoma.

Mr. Hooker returned to New York by way of California.

Scott Paper Reports Record Sales and Profits

● Scott Paper Company, Chester, Pa., manufacturer of toilet tissue and towels, reports for the year 1938 net earnings for common shares of $1,379,950, largest in the company's history. This is equal to $2.30 per share, calculated on the 598,664 shares outstanding December 31, 1938, as compared with $2.09 in 1937 on the same basis.

Dividends during the year were paid at the rate of $1.80 per share, including an extra dividend of $0.20 per share. In 1937, the per share rate was $1.55, including an extra dividend of $0.10 per share.

"Net sales were well maintained throughout the year and attained a new high annual record of $16,149,000, an increase over the previous year of more than 16%," Thomas B. McCabe, president of the company, stated in his annual message to the stockholders. Manufacturing facilities were operated at capacity throughout the year. Orders booked exceeded production for the third successive year, although manufacturing output had been increased 16% in 1938, 13% in 1937 and 13% in 1936 over the respective preceding years.

"During the year work was started on the largest expansion program the company ever attempted at its Chester plant, involving estimated capital expenditures of $2,500,000. In this connection $1,302,000 was expended in 1938," Mr. McCabe said. This program includes a complete paper making unit, additional finishing equipment, additions to steam and electrical power generating and distribution plant, increases to water intake, filtration and storage facilities and river front improvements, including a pier for receipt, storage and handling of pulp.

On January 1st, 1938, the company had outstanding $4,000,000 principal amount of 3¼% debenture bonds. This amount was reduced to $2,812,000 by the end of the year, $143,000 through sinking fund operations and $1,045,000 as a result of voluntary conversions into the company's common shares at the rate of 25 shares for each $1000 bond. The conversion privilege expires March 1, 1942.

Tucker of Stebbins Visits With Al Quinn

● E. F. Tucker, vice-president of Stebbins Engineering & Manufacturing Company, New York, arrived in Spokane March 5th. He was met by A. S. Quinn, vice-president of the Stebbins Engineering Corporation of Seattle, Pacific Coast subsidiary of the parent company at Watertown.

Mr. Tucker is in charge of technical development and supervision for all three Stebbins companies, including the two mentioned above and the Canadian Stebbins Engineering & Manufacturing Company of Montreal. His visit to the Coast was for the purpose of discussing with Mr. Quinn technical matters in connection with their work as specialists in digester and tank linings.

After two weeks of calling on Northwest pulp and paper mills, Mr. Tucker returned to Watertown by way of California and the southern states.

Can Technical Men Contribute To Good Industrial Relations

by A. R. HERON*

"My hypothesis is that there are laws governing human relationship; that the first step toward their discovery is the impartial accumulation of facts for microscopic examination rather than telescopic observation."

PERHAPS the greatest advance which industry and business have made in the last 25 years has been in the application of work like that in which most of you are interested. Physical progress has been tremendously rapid since industry began to apply the so-called scientific method to its physical problems.

The accumulation of proven facts, the analysis of these facts, the posing of hypotheses, the controlled experiment whereby the combination of certain facts and the exclusion of all others leads to conclusions of reactions, have furnished reliable guides. Industry has been able to determine in advance the results of the joining of materials, forces, processes, under pre-determined conditions. Behind this, and as a foundation for it, industry has developed accurate research to determine what materials, forces and conditions have produced results already visible.

This research, experiment, and exactness of method have been carried into fields other than the so-called mechanical field. Processes that for thousands of years have been accepted as inevitable, natural, or super-natural, have been found to comply with definite laws. Research has enabled men to understand, at least in part, the more important of those laws. By complying with the laws himself he has been able to control some of the results previously accepted as incapable of control.

There was undoubtedly a time in human industry when the presence of an ample crop of grass for the flocks was looked upon as an expression of the goodwill of the Gods, or of the temporary superiority of a friendly God or Goddess over the unfriendly ones. It was a great step forward when man learned the luxuriant crop represented the planting of seed.

Today he has gone farther and measured the function of moisture. He has complied with the law of nature by supplying adequate moisture artificially. He has explored the facts to determine the function of various soil chemicals and has supplied the deficiencies artificially. He has comprehended and measured the negative effects of other elements such as diseases and parasite pests. By further experiment he has found the materials or conditions which furnish protection to plant life against these enemy forces.

Through these and a wealth of other explorations, researches and experiments, he has not repealed or changed the laws of nature governing the growth of crops but he has learned the existence of those laws and by compliance with them has made the earth capable of supporting a population far beyond its theoretical capacity.

● At least two great areas of intangibles remain as challenges to the scientific mind. Into each of them science has made a preliminary advance. It may be said that in each of them science has reached the stage where it can foretell the results of given combinations but has not reached the stage where it can contribute factors which will, in compliance with the effective laws, produce beneficient and desirable results.

The first of these fields is that of weather and climate. Enough of the elements and the laws of their working together have been discovered so that general weather conditions can be foretold for a long period in advance, specific weather conditions for a short period in advance. Negative compliance with the erring laws, to avoid bad results, has been accomplished to a limited degree. Adequate heating systems have been developed, air conditioning and weather conditioning are accomplished facts. These are defenses against known results which can be anticipated. They are not contributions to the processes which produce weather and climate. They are defenses, not controls.

In the light of progress of the last centuries, we are not justified in saying that future generations cannot accomplish the same measure of control over atmospheric conditions as past generations have accomplished over growth of plant life. We are not justified in saying that there will never be processes of weather conditioning of an area which is not enclosed, or of preventing the partial condensation of moisture in the form of fog. Perhaps generations of fanatical research men will spend their lives in futile attacks on these problems, and perhaps the twenty-first century will see their solution.

The other field which challenges the scientific method is that of human relations. Very slowly and very recently the facts which must furnish the foundation for the hypotheses in this field have been collected and recorded. History and biography have furnished incomplete and distorted records of past facts. Mythology, some forms of theology, philosophy, and political sciences have created hypotheses based on these inadequate and unreliable facts. Lacking the possibilities of controlled experiment, we have accepted the hypotheses as proven rules. We are approximately in the same stage of the science of human relations as were the alchemists of the middle ages in their relation to the physical sciences.

The theme I am presenting to you tonight is naturally a pure hypothesis. It remains to be checked and counterchecked and proven. It is as far from demonstration as the thesis that man can control weather. It involves the same processes of accumulating facts, analyzing and classifying them so as to indicate basic rules, and complying with those rules to achieve the best results. The compliance with the rules must have in it the same general steps that have brought about the control of the production of plant life—the planting of seeds, the supplementing of deficient elements, the attack upon enemy elements, and the recognition of cyclical changes.

*Director of Industrial Relations, Crown Zellerbach Corporation and Rayonier Incorporated. Presented at the Dinner Meeting held by the Pacific Section of TAPPI at Seattle, Washington, on March 7th, 1939.

"We are approximately in the same stage of the science of human relations as were the alchemists of the middle ages in their relation to the physical sciences."

"Is there a field for the scientific method in human relations? We cannot say 'no' until even that answer has been subjected to scientific tests."

Is there a field for the scientific method in human relations? We cannot say "no" until even that answer has been subjected to scientific tests. I have a small library of volumes dealing with the subject and can honestly say that none of them even approaches scientific method as we know it in the laboratory. In almost every case, the author has had the theory, the philosophy, the hypothesis, and has attempted to prove that rather than to test it. We have a hopeless lack of impartially recorded facts, particularly facts which would correspond to those you accept in the laboratory. We have tried to formulate rules of conduct bases on generalization of fact. It is only vaguely helpful to know the sequence of civilizations in Egypt, Mesopotamia, the Mediterranean world, etc. The generalizations which history has brought us about the Conquests of Alexander and of Rome, the history of slavery, the Spanish exploitation of the new world gold, the euphemism "Britannia Rules the Waves," The Renaissance, the aspirations toward democracy, these all have contributed to our emotional comprehension of trends. None of them have supplied facts which enable you and me to get along better with the people whose lives are mingled with ours in the year 1939.

● There is one fundamental difference between the problem of application of science to human relations, and the application of science to weather controls. For the second, the world can wait a thousand years. But in the field of human relations every year that we wait, every year that we go on in ignorance and noncompliance with the laws which are at work, levies an incredible cost on the human race.

Even in generalities we can see the evidence that we are not complying and cooperating with the laws in such a way as to bring beneficient results. Wars, diseases, poverty in the midst of plenty, remnants of class conflict, are all parts of the price we pay for our ignorance.

● My hypothesis is that there are laws governing human relationship; that the first step toward their discovery is the impartial accumulation of facts for microscopic examination rather than telescopic observation.

The first denial of this hypothesis will come from the man who says that differences between human beings disprove the theory of laws of action and interaction among them. There was a time when the exceptional similarity of two men was described by saying that they were as like as two peas. The men who work in that particular branch of science today know that there never have been two peas in the history of vegetable life which were really identical.

It is no conclusive answer to say that the methods which work in England will not work here; that the industrial organization of Sweden cannot be applied on the Pacific Coast; that the psychology of human relations which might work among the Anglo-Saxon of Michigan will not work among the Afro-Americans of Alabama. What of it? The farming methods used in Holland are not the same ones that can be applied in North Dakota. The forestry of Washington is not the same as that of Louisiana. The vineyard methods of Italy would not work in California.

And yet the rules of seed selection, planting, chemical sufficiencies, and adaptation to climate conditions are fundamental in the agriculture of the whole world.

I have no answers, and no proof of my hypothesis. If I am right, some of you will furnish some of these answers and proofs. The pressure for scientific exploration in the field of human relations has been created by the very successes of science in fields of mechanics, structure and dynamics, in the fields of agriculture and of invention. These successes have quickened the tempo of our lives, intensified our contacts, and enlarged our group relations, while the scientific study of lives and contacts and group relations has dragged behind.

● The last 25 years have produced a new group which calls itself a profession. I refer to Personnel and Industrial Relations men. We are really good—about as good as the 14th century alchemist. We still brew potions and produce evil smelling smokes to get rid of some of the demons which we blame for our troubles.

We even draw accurate pictures of the evil spirits which are causing the trouble. If this man could be gotten out of the country, if the membership of that board could be changed, if a certain law could be repealed or amended, the cause of the trouble would all be removed. This is much easier than the study of specific problems which are the real units in our hnman relations.

We need to accumulate facts about the daily grievances and misunderstandings between the private and the sergeant, between the wage earner and supervisor who directs his work.

We need you to tell us how to begin compiling significant facts, we need to know how to compile facts scientifically and impartially.

We need to have some of the conditions of the modern industrial and social organizations examined by some one who has the scientific approach. For instance, we have no conception of the significance of the fact that the tools of production are owned by one group of people called stockholders and used by another group of people called wage earners. We have no understanding of what it means that the millions who work for wages do not personally own the tools, equipment and materials with which they work.

We do not even understand what

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ownership means. We need to know some of the facts about the tens of millions of wage earners who are actually the technical owners of American industry, the small stockholders in the large companies.

We need facts which will throw light on the ignorance which leads some so-called owners to believe that their best interest involves continuing disadvantages to the so-called wage earners. We need facts tabulated, analyzed and interpreted to tell us why as wage earners we think that we can derive a benefit from injuring the enterprise for which we work.

● In one small field we have found the way. Twenty-five years ago a few people began to tabulate facts scientifically in connection with industrial accident injuries. Up to that time the accident to a worker was part of the hazard of the job. A mill, a mine, or a factory was just a dangerous place to work. Once a fellow's number was up he got hurt. If he was lucky he recovered. But if his number was finally up he was killed.

It was not very long after the accurate recording of the facts began, until those facts led to one extremely important discovery. That is that less than 10 per cent of the accidental injuries were due to physical or mechanical causes and above 90 per cent were due to human cause.

The people who had made this their life work refused to accept the answer that you cannot change human nature. They refused to believe that there are no fundamental methods which can be scientifically devised for the guidance of human nature. They posed the opposite hypothesis and they have tested and proven their position. Safeguarding of mechanical equipment continued to improve, but by the careful analysis and interpretation of human conditions and reactions involved in thousands and hundreds of thousands and then millions of accidents, certain rules of human conduct and human attitude have been developed. The mine and the mill and the factory are safer places today than the home.

● A quick glance at one small portion of this field tells the story. In the Pacific Coast pulp and paper industry 10 years ago, one man in every nine suffered a disabling injury every year. Today the ratio is about one man in 33. It is almost four times safer to work in one of these plants today than it was 10 years ago. And the important thing is that a very small fraction of this improvement has been due to the correction of mechanical hazards. Almost all of it has been due to the application of scientific method in finding out how we should think in order to work safely.

Another lesson from this small field carries over into the larger field of human relations. The reduction of the accident hazard for the individual worker has had a direct relationship to many things which we still ignore when we deal with the larger problem of human relations. His susceptibility to accident is influenced by the scowl on the face of the foreman, the arbitrary attitude of the management, the insufficiency of his wages to pay his bills, the fear of sickness involving more bills for doctors and hospitals and drugs, the haunting thought that he is facing his 40th birthday next week.

The personnel and industrial relations men in industry today have largely been trained in the school of practical experience. Those who have been taught the technique of science are rare. Before it becomes a profession, this occupation will need ground work in elementary statistics, logic, sanitation, wage economics and a half a dozen other related sciences. Right now the dozen or more men who are doing this work in the Pacific Coast pulp and paper industry need advice, guidance, and inspiration toward the job of just writing down facts. We are never going to know any big answers until we have recorded and analyzed a great mass of small questions.

We no longer think of accepting the products of the pulp mill or the paper machine on the verdict of a foreman that it looks all right or feels all right. We still accept the results of the human relations in the department on the basis of the foreman's verdict "Jones was beefing again this morning, but I have him well straightened out." I think we are coming to the time when the fact that Jones was beefing again this morning will be treated as a significant fact, even though we cannot comprehend the significance of it until it has been put along side a hundred other facts. If Jones was beefing again, he had been beefing before. If it was the same complaint we should have had a record of it the first time, another record the second time and if this was the third time, we should have been able to formulate some action which would eliminate the cause of the complaint.

We all rebel against paper work, against making clerks of production supervisors. But the safety supervisors who have made industrial life 300 per cent safer in the last 10 years have not been able to do it without records. They have not accomplished these results by their charming personalities or by making speeches to safety committees or groups of foremen or superintendents. They have accomplished it by having a written record of every accident; by accumulating and analyzing all of these records; by drawing certain conclusions from the analysis and conveying those results to both supervisors and workers.

● I believe it was Otto Hartwig who characterized the problem of industrial relations as "accident prevention in human relations." If the progress in the prevention of physical accidents is going to be duplicated in this other field of human relations, in your mill, in our industry, in our Pacific Coast area, or in our country, it will be by something of the same method. With your background of chemistry or physics or engineering you are facing a challenge from the men who are trying to do personnel and industrial relations work. We want you to look upon us as feeling our way toward a scientific method to apply to our job. Many of you are in close contact with the daily life of the departments in your mills. You can see the kind of facts which should be recorded. You can help us to begin quietly building up the priceless files of material out of which will be built scientific method of accident prevention in human relations.

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"In one small field we have found the way. . . . In the Pacific Coast pulp and paper industry 10 years ago, one man in every nine suffered a disabling injury every year. Today the ratio is about one man in 33. It is almost four times safer to work in one of these plants today than it was 10 years ago. And the important thing is that a very small fraction of this improvement has been due to the correction of mechanical hazards. Almost all of it has been due to the application of scientific methods in finding out how we should think in order to work safely."

TAPPI Hears Papers On Ceramics and Human Relations

● The Pacific Section of TAPPI held its fifth dinner meeting of the 1938-39 season on Tuesday evening, March 7th, at the Washington Athletic Club in Seattle. Approximately 120 attended to hear the two talks which were presented.

Pacific Section Chairman N. W. Coster presided and reported on his attendance at the annual meeting of TAPPI in New York City in February. He made an announcement of plans for the 1940 Fall TAPPI meeting which is to be held in Seattle, details of which are published elsewhere in this number.

Mr. Coster also announced that it had been decided at a joint executive committee meeting held that afternoon by the officers of the Pacific Section and the officers of the Pacific Coast Division of the American Pulp & Paper Mill Superintendents Association, to hold a joint Spring meeting of the two associations.

The dates are June 2nd and 3rd and the place the Hotel Winthrop in Tacoma.

Niles Anderson, assistant superintendent of the St. Regis Kraft Company of Tacoma and second vice-chairman of the superintendents association, will be general chairman of the joint meeting.

A number of superintendents present were introduced by Chairman Coster including L. S. McCurdy, paper mill superintendent of the National Paper Products Company, Division of Crown Zellerbach Corporation of Port Townsend, past chairman of the superintendents association and a vice-president of the national superintendents group; Anton Siebers, first vice-chairman of the Pacific Coast Division of the superintendents and paper mill superintendent of the Longview Fibre Company; and, Niles Anderson who will handle the joint meeting as mentioned above.

The first speaker, J. Gordon Adderson, assistant superintendent of Gladding, McBean & Company at Renton, Washington, presented his paper entitled, "Trends and Developments in the Manufacture of Ceramic Products for Industrial Use." Mr. Adderson's paper will be published in the April number of PACIFIC PULP & PAPER INDUSTRY.

Chairman Coster then introduced as the second speaker A. R. Heron, director of Industrial Relations for Crown Zellerbach Corporation and Rayonier Incorporated, who spoke on, "Can Technical Men Contribute to Good Industrial Relations?" Mr. Heron's talk is published in full in this issue.

Appreciation for his work in making arrangements for the Seattle dinner meeting was expressed by Chairman Coster to Douglas C. Morris of the James Brinkley Company.

The following registered at the Seattle TAPPI dinner meeting on March 7th:

● **J. Gordon Adderson,** Gladding, McBean & Co., Renton, Wash.; **Niles M. Anderson,** St. Regis Kraft Co., Tacoma; **W. G. Ballantyne,** Western Gear Works, Portland; **Thomas J. Bannan,** Western Gear Works, Seattle; **H. W. Beecher,** Consulting Engineer, Seattle; **Iver E. Belsvig,** St. Regis Kraft Co., Tacoma; **C. H. Belvin,** Chromium Corp. of America, Portland.

Dr. H. K. Benson, Dept. of Chemistry, University of Washington, Seattle; **Emil Berger,** St. Regis Kraft Co., Tacoma; **H. K. Berger,** Everett Pulp & Paper Co., Everett; **H. L. Bibbins,** Electric Steel Foundry Co., Seattle; **S. B. Biddle, Jr.,** Leeds & Northrop Co., San Francisco; **H. S. Brett,** A. M. Castle Co., Seattle; **J. F. Brinkley,** James Brinkley Co., Seattle; **A. M. Buck,** Pulp Division, Weyerhaeuser Timber Co., Everett.

Leo S. Burdon, Soundview Pulp Co., Everett; **A. M. Cadigan,** St. Regis Kraft Co., Tacoma: **R. D. Campbell,** St. Regis Kraft Co., Tacoma; **R. S. Carey,** National Aniline & Chemical Co., Portland; **John M. Carlson,** Soundview Pulp Co., Everett; **Robert Carlson,** Pulp Division, Weyerhaeuser Timber Co., Everett.

Harold D. Cavin, Consulting Engineer, Seattle; **Kenneth Chapman,** Pulp Division, Weyerhaeuser Timber Co., Everett; **R. E. Chase,** R. E. Chase & Co., Tacoma; **Walter Clough,** Pulp Division, Weyerhaeuser Timber Co., Everett; **Sidney M. Collier,** Puget Sound Pulp & Timber Co., Bellingham; **Dick H. Cook,** Chase Brass & Copper Co., Seattle; **Stephen Coney,** National Paper Products Co., Division of Crown Zellerbach Corp., Port Townsend.

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April Dinner Meeting In Camas, April 4th

The April Dinner Meeting sponsored by the Pacific Section of TAPPI will be held in Camas, Washington, on Tuesday evening, April 4th, at 6:30 p. m.

The place will depend upon the number of advance reservations, either the Crown Willamette Inn or the Camas High School auditorium.

W. R. BARBER, Technical Director of the Crown Zellerbach Corporation, will talk to the younger men of the industry on the value of presenting papers and he will outline TAPPI's purpose in creating the Shibley Award.

The program will be given over to papers entered in the Shibley Award competition.

● John Howarth Bardsley of the Powell River Company, Powell River, B. C., will present a paper on "Per Cent Sulphite versus Beating of the Sulphite in the Manufacture of Newsprint."

● L. A. Wendt of the Everett Mill, Pulp Division, Weyerhaeuser Timber Company, will offer a paper on, "A Discussion of the Operation of Photo-Electric Consistency Controllers."

● Claude Christiansen of the Technical Department of the Camas Mill, Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, will give a paper entitled, "A New Control Pulp Tester."

RESERVATIONS should be sent to A. G. NATWICK, Assistant Mill Manager, Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas, Washington, as Mr. Natwick is in charge of arrangements for the Camas dinner meeting.

• **N. W. Coster,** Soundview Pulp Co., Everett; **A. E. Duke,** Soundview Pulp Co., Everett; **Erik Ekholm,** Puget Sound Pulp & Timber Co., Bellingham; **E. O. Ericsson,** Puget Sound Pulp & Timber Co., Bellingham; **H. H. Evans,** St. Regis Kraft Co., Tacoma.

L. P. Fortier, Everett Pulp & Paper Co., Everett; **O. E. Fox,** Pulp Division, Weyerhaeuser Timber Co., Everett; **J. D. Fraser,** Pulp Division, Weyerhaeuser Timber Co., Everett; **N. O. Galteland,** St. Regis Kraft Co., Tacoma; **Irving R. Gard,** Merrick Scale Mfg. Co., Seattle; **A. S. Gerry,** Pulp Division, Weyerhaeuser Timber Co., Everett; **William R. Gibson,** Northwest Filter Co., Seattle; **Harold Griep,** Pulp Division, Weyerhaeuser Timber Co., Everett; **H. M. Gustafson,** General Electric Co., Seattle; **Kenneth B. Hall,** Improved Paper Machinery Co., Portland; **S. H. Harrison,** Westinghouse Electric & Mfg. Co., Seattle.

Alexander R. Heron, Crown Zellerbach Corp. and Rayonier Incorporated, San Francisco; **L. E. Hill,** Pulp Division, Weyerhaeuser Timber Co., Everett; **George C. Houghton,** United States Rubber Co., Seattle; **George W. Houk,** Hooker Electrochemical Co., Tacoma; **K. L. Howe,** Westinghouse Electric & Mfg. Co., Seattle; **R. M. Inkster,** Pulp Division, Weyerhaeuser Timber Co., Everett; **Ray Johnson,** Pulp Division, Weyerhaeuser Timber Co., Everett; **Gertrude Julien,** Pennsylvania Salt Mfg. Co. of Washington, Tacoma; **Frank G. Keuss,** St. Regis Kraft Co., Tacoma; **B. L. Kerns,** Westinghouse Electric & Mfg. Co., Seattle; **Robert M. Kuhn,** St. Regis Kraft Co., Tacoma; **H. R. Lawrence,** Northwest Lead Co., Seattle; **R. E. LeRiche,** Brown Instrument Co., Seattle.

J. H. McCarthy, Soundview Pulp Co., Everett; **L. S. McCurdy,** National Paper Products Co., Division of Crown Zellerbach Corp., Port Townsend; **J. W. Merriman,** J. W. Merriman Paint Co., Seattle; **Kyle Milligan,** Northwest Lead Co., Seattle; **T. E. Moffitt,** Hooker Electrochemical Co., Tacoma; **Chas. A. Newhall,** Washington State Laboratory, Seattle; **R. S. Niccolls,** Columbia Steel Co., Seattle; **Fred Nicholson,** Stetson-Ross Machine Co., Seattle; **E. A. Norton,** Pulp Division, Weyerhaeuser Timber Co., Everett.

N. W. COSTER, Chairman Pacific Section of TAPPI

F. A. Olmsted, Crown Willamette Paper Co., Division Crown Zellerbach Corp., Camas; **Jerry Alcorn,** Pulp Division, Weyerhaeuser Timber Co., Everett; **W. M. Osborne,** Hooker Electrochemical Co., Tacoma; **Frederic M. Pape,** Wilson & Geo. Meyer & Co., Seattle; **Walter L. Penick,** Western Precipitation Corp., San Francisco; **Paul Pittenger,** Pulp Division, Weyerhaeuser Timber Co., Everett; **R. T. Petrie,** Bagley & Sewall Co., Portland.

A. S. Quinn, Stebbins Engineering Corp., Seattle; **Carl A. Ramstad,** Soundview Pulp Co., Everett; **L. B. Robinson,** General Electric Co., Seattle; **Oliver E. Ronken,** Soundview Pulp Co., Everett; **Don Ross,** Hooker Electrochemical Co., Tacoma; **James Rusk,** St. Regis Kraft Co., Tacoma; **H. R. Russell,** Everett Pulp & Paper Co., Everett.

• **S. A. Salmonson,** Soundview Pulp Co., Everett; **W. A. Salmonson,** Coast Mfg. & Sales Co., Seattle; **B. W. Sawyer,** Foxboro Co., Portland; **George E. Schmidt,** Pennsylvania Salt Mfg. Co., Tacoma; **Walter A. Schmidt,** Western Precipitation Corp., Los Angeles; **Ferdi Schmitz,** Pacific Car & Foundry Co., Renton; **Harlan Scott,** Pacific Pulp & Paper Industry, Seattle.

A. P. Siebers, Longview Fibre Co., Longview; **Charles Server,** Appleton Woolen Mills, Olympia; **J. E. Shackelton,** Columbia Steel Co., Seattle; **Fred Shaneman,** Pennsylvania Salt Mfg. Co. of Washington, Tacoma; **J. M. Shedd,** Everett Pulp & Paper Co., Everett; **Brian Shera,** Pennsylvania Salt Mfg. Co. of Washington, Tacoma; **Lawrence K. Smith,** Pacific Pulp & Paper Industry, Seattle; **Stanley E. Sorenson,** Pulp Division, Weyerhaeuser Timber Co., Everett; **L. H. Spaulding,** Federal Pipe & Tank Co., Seattle.

J. D. Sullivan, Rayonier Incorporated, Seattle; **P. E. Sullivan,** Ingersoll Rand Co., Seattle; **R. I. Thieme,** Soundview Pulp Co., Everett; **Earl G. Thompson,** Great Western Division Dow Chemical Co., Seattle; **E. F. Tucker,** Stebbins Engineering Co., Watertown, N. Y.; **R. O. Vognild,** Hooker Electrochemical Co., Tacoma; **Edward A. Vohs,** Pulp Division, Weyerhaeuser Timber Co., Everett; **H. F. Warren,** R. E. Chase & Co., Tacoma.

William Webster, St. Regis Kraft Co., Tacoma; **Fred Wellington, Jr.,** Western Gear Works, Seattle; **L. A. Wendt,** Pulp Division, Weyerhaeuser Timber Co., Everett; **F. W. Whitney,** Engineer, Kirkland; **R. E. B. Wood,** Pulp Division, Weyerhaeuser Timber Co., Everett.

Quinn Thinks Deep Rivers Prospects Are Good

• World-wide market slump and general uncertainty in financial circles as a result of continued unsettlement in Europe have slowed up the progress of negotiations for new pulp and paper projects in British Columbia, but at least one of them appears to be nearing the stage where news of definite development may be expected.

Surveyors are now at Campbell River, Vancouver Island, staking the boundary lines of the extensive holdings acquired by Deep River Development Company, which plans a $12,000,000 power and pulp development utilizing waterpower from Elk River Falls.

Valentine Quinn, of Northern Construction Company, Vancouver, is one of the principals of the new company, and among his associates are J. P. and William Meehan, timber brokers.

According to Mr. Quinn, the enterprise will be financed chiefly by British capital, and the prospects of settling the financial details have greatly improved in recent weeks, he says.

"Britain is more anxious than ever to place funds for investment overseas, especially in countries like Canada where the danger of confiscation is absent. Furthermore, there is a growing realization that the world's greatest pulpwood resources are located in the Pacific Northwest," said Mr. Quinn. "British Columbia is being regarded favorably as a field for British pulp investment because of its established financial security and the various physical factors such as raw material supply, waterpower, tidewater facilities and low cost operation."

Elk River Falls in the Campbell River area have long been regarded as a suitable site for large-scale power development and pulp and paper activity. Ten years ago International Harvester Company and Crown Willamette Paper Company contemplated pulp projects there, and even now British Columbia Power Corporation, largest public utility organization in Western Canada, retains its rights to a large proportion of the hydro-electric power available in that section. Collapse of the markets in 1929-33 resulted in International Harvester and Crown Willamette abandoning the field, and there was no further talk of pulp and paper development until Deep River Development Company announced its plans and obtained approval from the provincial government.

The properties involved are 1400 acres at Duncan Bay from a Campbell River syndicate for a townsite and location of the rayon pulp mill; 125 acres bought from Bloedel, Welch & Stewart, loggers, where the new company's sawmill will be located; thirty acres up and down Bulldog Canyon where the powerhouse and two dams will be built; four holdings of 670 acres above the first dam towards Forbes Landing. On the Bloedel holdings there is considerable timber which will be available for the sawmill in cutting lumber for the mill's construction.

It is proposed to place a dam thirty feet high at the mouth of Bulldog Canyon, eight feet above the relief bridge, and a 150-foot dam at the foot of the canyon. Power will be developed as required, but it is expected that the first unit of the proposed pulp mill will have a capacity of at least 200 tons, probably more.

• Deep River Development Company is reported to have placed a deposit of $90,000 with the provincial government guaranteeing that it will go ahead and spend $12,000,000 within the next five years, starting May 3, 1939, or sooner. Gerald M. Christie is in charge of the survey now being made.

Mr. Quinn states that it is proposed to furnish water to Campbellton and Campbell River towns for domestic and power purposes, and it is hoped to develop several subsidiary industries which in turn will add to the parent pulp company's revenues.

B. C. Power Corporation may yet go ahead with a hydro-electric scheme of its own at Campbell River, but it is understood that there is no conflict between the two interests.

Soundview Pulp Company Reports Reduced Earnings

But the Company Ended 1938 in a Stronger Financial Position — Plans Further Debt Reduction

● The Soundview Pulp Company of Everett, Washington, and subsidiaries, reported a consolidated net profit of $268,275 for 1938, after depreciation, depletion, amortization, interest and federal income taxes, equal, after preferred dividends, to 29 cents a share on 488,250 shares of common stock outstanding.

This compares with a net profit of $1,626,898 in 1937 on the same basis, equal to $3.23 a share. During 1938 the provision for depreciation and depletion amounted to $501,587, compared with $395,241 in 1937, an increase in these charges of $106,346, or approximately 27 per cent.

Soundview's pulp mill operations averaged but 42 per cent of capacity for 1938. Sales dropped 37.84 per cent from the 1937 level.

The company improved its financial position during the year. Capital assets increased $291,748. Notes payable to banks, maturing more than one year from balance date, were reduced by $500,000. Additional deposits on timber options and related expenditures were made in the amount of $26,111.

Soundview paid dividends during 1938 in the amount of $247,747.

Production for the year amounted to $69,774 tons, while sales were $83,297 tons, thus reducing inventory from 32,514 tons on January 1, 1938, to 18,991 tons at the year-end. The inventory was carried on the balance sheet at $2,176,728 on January 1, and by December 1, 1938, had dropped to $1,285,379.

In describing the results of the year, Harry H. Fair, chairman, said in a letter to stockholders: "It will be observed that the indebtedness was reduced during the year in the amount of $500,000. It should be noted that notes payable to banks in the amount of $1,300,000 have been reissued with annual maturities of $130,000 beginning January 16, 1940, and continuing until January 16, 1943, with the balance of $780,000 maturing January 16, 1944. It is gratifying to be able to report this substantial reduction and rearrangement of indebtedness. It will be recalled that this debt was incurred in 1937 in the acquisition of a protective supply of timber.

Further Debt Reduction Planned

● "As an incident in acquiring timber, with an interest only in the pulp species, hemlock, spruce and white fir, a considerable quantity of intermingled Douglas fir and cedar was acquired. Fortunately this Douglas fir and cedar is, generally speaking, in well concentrated, accessible blocks, aggregating approximately 467,000,000 feet. It is, generally speaking, of such high grade that in almost any lumber market it can be harvested and sold at prices that will return its stumpage cost of about $3 per 1,000 or more. It is the intention of the management to harvest this fir and cedar stumpage as rapidly as possible in the expectation that this operation should accomplish the retirement of a substantial part of this indebtedness."

Current position of the company was improved at year-end. As of December 31, 1938, current assets totaled $1,865,379, including $133,046 cash, while current liabilities amounted to $467,667, leaving working capital of $1,397,712. A year earlier, current assets, including $96,463 cash, amounted to $2,483,950 and current liabilities were $871,203.

Monthly earnings for January, 1939, were released for publication coincidentally with the 1938 annual report. In the statement the company revised its accounting practices. Heretofore, released monthly earnings have been determined upon an arbitrary charge to production costs for depreciation, calculated upon the full production capacity of the plant, and year-end adjustments were made at closing time. In the current January report, the practice was started of charging one-twelfth of the full annual depreciation against cost of sales each month.

The company and its subsidiaries reported consolidated net profit of $20,023 for January, 1939, after interest, depletion, depreciation and federal income taxes but before deducting provision for surtaxes on undistributed earnings, equal to more than 2 cents a share on 488,250 shares of common stock outstanding. This compares with net profit of $72,960 in January of 1938, equal to 13 cents a share on the same basis. Production for January, last, amounted to 8,718 tons and sales were 7,652 tons. This compares with production of 9,207 tons and sales of 6,944 tons in January, 1938.

Independently audited consolidated income account of Soundview Pulp Co. and subsidiaries for the year ending December 31, 1938, compares as follows:

	1938	1937	1936
Net sales	$4,062,929	$6,536,883	$3,114,728
*Costs and expense of pulp sold	3,386,466	‡4,346,075	‡2,380,664
Profit on pulp sold	$ 676,463	$2,190,808	$ 734,724
Profit on screenings sold		15,306	6,723
Gross profit	$ 676,463	$2,206,204	$ 741,446
Other income (net)	16,590		23,842
Total income before charges	$ 693,053	$2,206,204	$ 765,289
Administration, legal and other expense	54,570	96,009	35,261
Loss on disposal of assets	34,013	62,336	21,672
Interest on notes	55,529	41,651	19,509
Amortization of debt expense	229	4,836	706
Capital stock and miscel. tax	13,575	14,474	14,631
Social Security taxes	‡		5,256
Federal income taxes	57,000	285,000	100,000
Excess profits tax		66,000	
Surtax on undistributed profits		9,000	
Provision for depreciation pulp mill	209,862		
Net profit	$ 268,275	$1,626,898	$ 568,253

‡Not segregated. *Includes provision for depreciation, depletion and amortization of $291,715 in 1938. In 1937, depletion and depreciation aggregated $395,241. Due to reduction in depreciation base and rates to conform to the basis allowed by the Government, the depreciation provision for 1937 was about $54,000 less than would have resulted for the base and rates used in the preceding year. In 1938 provision for depreciation on pulp mill buildings and equipment has been charged to cost of production at a rate of $2.50 per ton of pulp produced, representing substantially the per ton rate determined upon the basis of "normal" capacity production; the remainder of the provision based upon rates established in prior years has been considered as being applicable to the pulp mill while not in use during the year.

Balance Sheet

● Independently audited consolidated balance sheet of Soundview Pulp Co. and subsidiaries as of December 31, 1938, compares as follows:

ASSETS

	1938	1937	1936
Cash	$ 133,046	$ 96,463	$ 544,609
Accounts receivable	313,320	210,758	344,964
Insurance claim			48,869
Advances to logging cont.	33,269		
Inventories	1,385,744	2,176,728	575,792
Total current assets	$1,865,379	$2,483,950	$1,514,235

Invest. and adv. in subs.	101	.....	15,168
Process right	18,025	20,600	23,175
Plant site	265,242	265,242	265,242
Timber, buildings and equipment, net	8,615,494	8,869,818	*5,847,990
‡Deposits on timber option	85,596	59,485	.....
Deferred and prepaid items	63,502	97,253	29,996
Total assets	**$10,913,339**	**$11,796,347**	**$7,430,564**
LIABILITIES			
Notes payable to banks	$ 30,000	$ 157,236	.....
Serial notes due in one year	.....	.....	$ 100,000
Accounts payable	195,660	229,859	142,857
Salaries and wages accrued	23,856	10,524	16,562
Construction contract payable	35,441	.....	641,282
Interest accrued	2,705	7,351	22,500
Taxes accrued	180,005	466,233	143,005
Total current liabilities	**$ 467,667**	**$ 871,203**	**$1,066,206**
†Timber purchase contracts	50,812	50,812	.....
Funded debt (notes)	162,000	162,000	900,000
Long term bank notes	1,300,000	1,800,000	.....
Preferred stock ($100 par)	2,107,508	2,107,508	293,008
Common stock ($5 par)	2,441,250	2,441,250	523,125
Capital surplus	3,917,052	3,917,052	4,406,889
Earned surplus	467,049	446,521	241,335
Total liabilities	**$10,913,339**	**$11,796,347**	**$7,430,564**

*Includes $2,071,275 construction work in progress.

‡Balances payable upon exercise are $5,000 on January 1, 1939; $15,000 on September 1, 1939, and $65,750 on October 1, total, $85,750.

†Due May 15, 1942.

St. Helens Enlarging Bleach Plant Capacity

• Bleach plant capacity will be increased by enlargements being undertaken by the St. Helens Pulp & Paper Co. Additional bleach tanks will be installed, together with the necessary pumps, agitators, etc., and an IMPCO rubber covered washer and auxiliary equipment.

This will not only increase the bleaching capacity at the mill, but will also improve the color of the bleached product. The revamped unit is expected to be in operation some time in April.

Vancouver May Have Waste Paper De-Inking Plant

• North American Pulp & Paper Company, with W. T. Miller managing director, has been organized in Vancouver, B. C., to develop the de-inking process of pulp manufacture, using printed paper as raw material.

A site for the plant has been selected on the north arm of the Fraser River, according to Mr. Miller, and it is hoped to begin operations late next summer. Machinery has been ordered, and construction of the mill will be started within a few days.

The company has been incorporated with a capital of $500,000. Similar plants are contemplated in Quebec and Toronto, with a combined production of 250 tons daily.

The de-inking process is now being used commercially and profitably in Gouverneur, N. Y., according to Mr. Miller.

Hatch to Spend Month in East

• Raymond Hatch, research director for the Weyerhaeuser Timber Company, leaves Longview March 19 for a month's business trip in the East.

Cavin Awarded Professional Engineering Certificate

• Harold D. Cavin, of the Seattle consulting engineering firm of Cavin, Marshall & Barr, has recently been awarded a certificate of qualification as a professional engineer by the National Council of State Boards of Engineering Examiners with headquarters in Columbia, South Carolina.

The certificate was issued by the Council together with a verified record of Mr. Cavin's professional work, following a complete checking of his engineering experience by letter and personal contact.

The National Council's certificate entitles Mr. Cavin to practice in any of the 42 states having engineering licensing laws.

Camas Mill Makes Record Run

• The Crown Willamette Paper Company mill at Camas made a record run last month when, in a mid-week 24-hour period, the plant produced 466 tons of various types of paper. On another day, a Saturday when there were 26 hours of operation, a total of 518 tons was produced. On a basis of 24 hours, this would have meant a run of 477 tons in one day.

The daily average production of the mill is about 425 tons of paper.

Jack Hanny Back From East

• J. E. Hanny, resident mill manager of the Crown Willamette mill at Camas, returned to that city on March 8 after a trip in the East. He arrived home ill, however, and was not able to attend the Paper School graduation, for which he was hurrying home.

Charles F. Schaub Passes In Longview

• Charles F. Schaub, founder and president of the Pacific Straw Paper & Board Company of Longview, Washington, died on March 2nd after an illness of six weeks. He was about 60 years of age.

Since 1922 when he arrived at the newly established community of Longview, Mr. Schaub took an active and prominent part in civic and industrial affairs, organizing the Pacific Straw Paper & Board Company which has grown steadily and now employs 140 men.

Mr. Schaub was president of the manufacturers' Association of Washington in 1930 and 1931. He was a member of the Arctic Club of Seattle, the Elks Lodge of Longview, and both the Longview and Portland yacht culbs. He was also active in the affairs of the Episcopal church not only in Longview but throughout the diocese of Olympia.

Born in Covington, Virginia, Mr. Schaub received his education at Vanderbilt University at Nashville, Tennessee. He is survived by his foster daughter, Ruth Purdy Springer of Seattle, a brother, William Schaub of Memphis, Tennessee, and a sister, Betty Elizabeth Lord of Chattanooga, Tennessee.

Funeral services were conducted by the Right Reverend S. Arthur Huston, bishop of the Episcopal diocese of Olympia.

The Pacific Straw Paper & Board Company, of which Mr. Schaub was president, manufactures a variety of board and board products. W. E. Lackey is secretary-treasurer and Arthur Zimmerman is general manager.

Investigating Oriental Market for B. C. Logs

• Primarily to check on the log and lumber market in the Far East now that the war appears to be in its final stage but also to sound out Japanese and Chinese buyers on the question of pulp and pulp log purchases Colonel Nelson Spencer, Vancouver, B. C., has left for Hongkong on the China Clipper.

Colonel Spencer has been an important figure in British Columbia's log export trade to Japan for several years.

"I look for a tremendous demand for logs, lumber, pulp and newsprint in the Orient as soon as conditions become more settled," said Colonel Spencer. "And now is the time for business men interested in those industries in the Pacific Northwest to make their move. The Orient is just as important a market as it ever was, and the fact that Japan has given notice that she intends to control the trade of a large part of China should not seriously hinder us.

"After all, the Orient needs raw materials and Japan and China must look to the Pacific Northwest for a large proportion of them. China will soon be facing a huge reconstruction job, and China and Japan will be obliged to look to this part of the world for timber.

"The pulp and paper industries of China and Japan have been forced to curtail production almost to the point of extinction in some cases, and a return of peaceful conditions will lead to the biggest demand in years for supplies from this market."

Weyerhaeuser Makes Improvements In Longview Bleached Sulphite Mill

Program Recently Completed Included Circulating Systems, Bronze Screen Vats, SO_2 Recovery System and Additional Turbine

● During the past year the Longview mill, Pulp Division, Weyerhaeuser Timber Company, has completed numerous important improvements which serve to keep the plant at peak efficiency and the product at high quality.

The major change in the mill consisted of the fitting of circulating systems on six digesters. The newest digester, No. 7, was equipped with such a system at the time it was put in.

The new type of circulating system screens, which are made in sections and which may be removed for cleaning without removing the screen frame, are employed. The upper portion of the suction piping, supported by brackets, runs down the inside of the digester to the outlet fitting, permitting the use of light gauge plate in its fabrication. An angle valve is used between the outlet fitting and the upper end of the external suction pipe, in place of the globe valves sometimes installed. The angle valve keeps the piping close to the digester.

One feature of the circulating systems, which were designed by the Electric Steel Foundry Company, is that no heaters were provided in the circulating line. However, provision was made for later fitting of suitable heat-exchangers if they should be desired.

The suction pumps are placed low to gain the maximum amount of suction head available, and all of these pumps were manufactured by the Bingham Pump Company of Portland. The Bingham pumps have a capacity of 3,000 gallons per minute, which provides a complete turnover of cooking liquor approximately every 10 minutes, or about six times per hour.

Strains due to unequal expansion are eliminated in the pump installation by the use of spring mounting or a "floating base." Both pump and motor are so mounted as a unit. The motors used are each 75 hp. 2,200 volt induction type.

● As designd by the Bingham Pump Company, the pumps are suited to the severe service of circulating hot acid under pressure, with low maintenance under these conditions. Leakage of acid is prevented by a special high pressure water seal. Ball bearings, water cooled, are employed.

Suction lines are 12-inch and discharge lines are 12-inch piping. In the discharge line next to the digester bottom fitting is employed an electrically operated eight-inch angle valve, which operates the discharge line from the circulating pump. These valves are made of stainless steel by the Vaughan Motor Company of Portland, who also made other valves and fittings in the digester building.

In this installation an orifice plate is placed in the discharge line between the pump and the digester, connected with a flow meter to indicate the liquor flow during the cook.

Another improvement at the Longview mill has been the development of a method for recovering available SO2 gas set free during digester blow-off. Equipment to employ this method was installed and put into successful operation. It will be described in detail in a subsequent issue of Pacific Pulp and Paper Industry.

Install Everdur Screen Vats

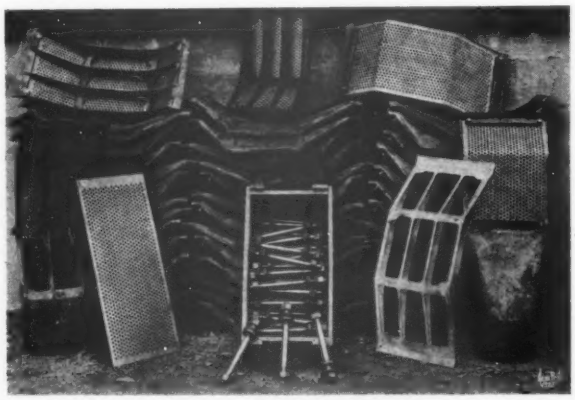
The original installation of wooden screen vats, which had become soft and water-soaked, were replaced during the year by metal flat screen vats which, instead of being cast, are of rolled Everdur bronze. They were placed on top of the original drive frames. The installation has resulted in greater screening capacity with the same footage of screens.

A new method of fabrication and plate holding was worked out, and the vats were designed and built in collaboration with the Vaughan Motor Company of Portland. The development does away with cross rods and camber bars, and results in less maintenance and cleaner pulp.

The sides of the vats were of rolled Everdur bronze. Studs and nuts and hold-down bars are also of Everdur, while cross members are of the cast bronze. Through the new method of plate holding, which has proved satisfactory, the plates are held down by renewable metal bars and stud bolts equipped with acorn heat nuts. All parts are interchangeable.

New Westinghouse Turbine

In the machine room, a turbine was installed to take advantage of the high pressure steam available from the power house, and to act as a reducing valve to supply low pressure steam to the Minton vacuum dryer. The new unit is a



NEW TYPE ESCO CIRCULATING SYSTEM SCREENS as installed in the Pulp Division, Weyerhaeuser Timber Company's circulating systems at Longview, Washington ' ' ' Made by the Electric Steel Foundry Company of Portland.

750-KW Westinghouse turbo-generator, which takes steam at 135 lbs. pressure and reduces it to a range of from zero to 35 lbs. back pressure. The power produced is tied into the general electrical system of the plant.

During the year other improvements were made to improve the cleanliness of the pulp. A new Grundler pulverizer was installed to refine knots, with very satisfactory results.

Port Mellon May Resume When Oriental Situation Settled

• Port Mellon Operating Company may resume production of kraft and other pulp at its Howe Sound plant in British Columbia when the Sino-Japanese war is over but probably not before, according to Pat Burns, one of the company's officials.

F. W. Leadbetter, president of Port Mellon Company, was in Vancouver recently discussing plans for the mill, but was unable to throw much light on the company's prospects.

The mill was reconditioned at considerable cost in the winter of 1936-37 and was operated for several months, but difficulty in obtaining ship tonnage handicapped exports and eventually the impossibility of getting the necessary credits from Japan forced a shutdown.

The greater part of the output of the Port Mellon mill was sold to Japan, and re-opening of the mill is said to depend on when Japan is ready to re-enter the market.

Foley Returns To Vancouver

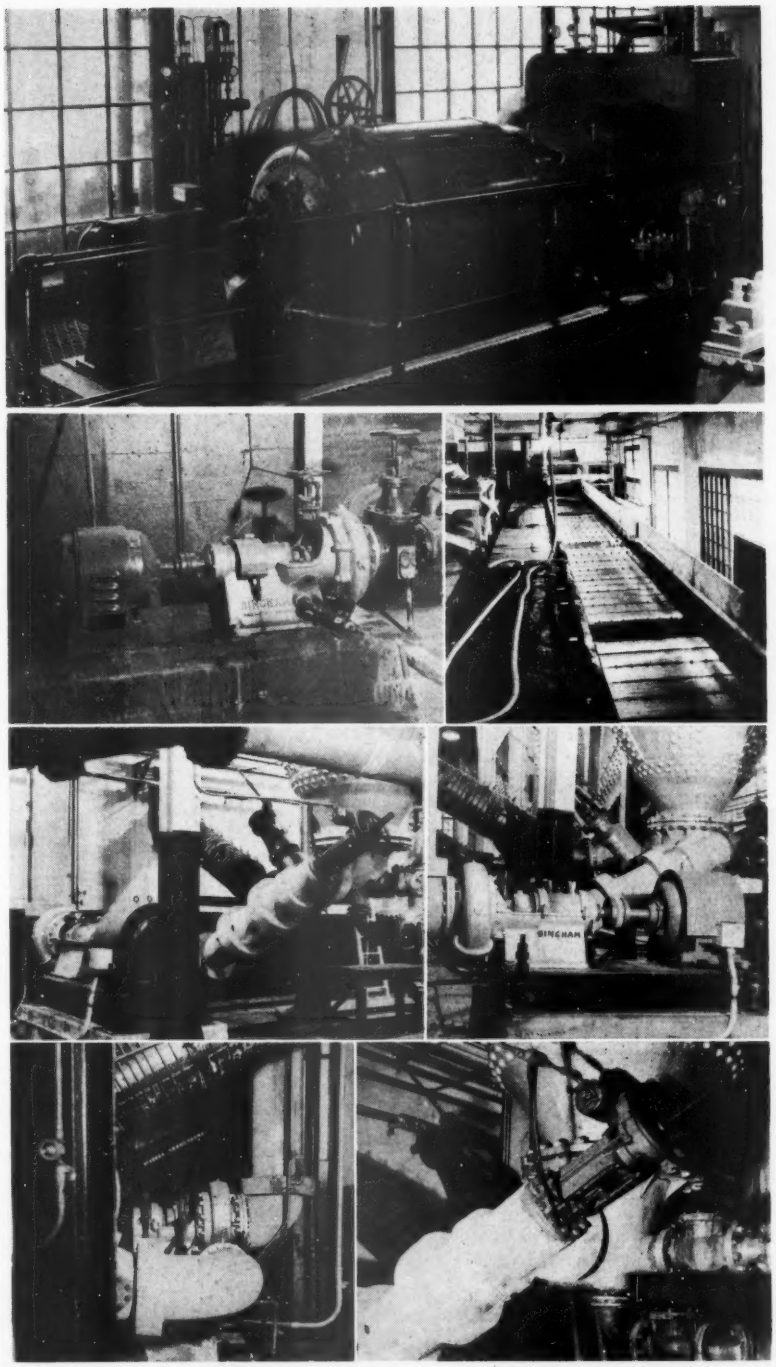
• Harold J. Foley, executive vice-president of Powell River Company, has returned to Vancouver head office after spending several months in Florida. Before taking charge of the British Columbia newsprint organization Mr. Foley served some years with the Brooks-Scanlon interests in Foley, Florida. His father was one of the pioneers of the organization.

William D. Welsh Joins Crown Zellerbach

• Announcement was made on March 8th in Port Angeles that William D. Welsh, managing editor of the Port Angeles Evening News for more than twenty-five years, had been appointed to an executive position with Crown Zellerbach Corporation. Mr. Welsh left for San Francisco on March 12th to assume his new duties. His family will follow when school closes.

Mr. Welsh is undertaking special work in connection with the Crown Zellerbach exhibit at the Golden Gate Exposition in San Francisco and with the observance of "Crown Zellerbach Day," April 8th, which has been so designated by fair authorities.

Mr. Welsh will continue his regular column in the News and will return at Christmas time each year to Port Angeles to conduct his famous Christmas fund campaign column in the character of "Beacon Bill."



IMPROVEMENTS RECENTLY COMPLETED in the Longview bleached sulphite pulp mill of the Pulp Division, Weyerhaeuser Timber Company, included, at the top, a new 750-KW Westinghouse turbo-generator; fitting of ESCO stainless steel circulating systems on six digesters; VAUGHAN motorized stainless steel valves, and BINGHAM stainless steel pumps for liquor circulation. Note the floating base mounting of the BINGHAM pumps to eliminate strains due to unequal expansion.

Wood flat screen vats have been replaced by rolled Everdur bronze vats manufactured by the VAUGHAN MOTOR COMPANY of Portland. The ELECTRIC STEEL FOUNDRY COMPANY of Portland cast the circulation system fittings and the BINGHAM PUMP COMPANY of Portland designed and manufactured the pumps.

AT THE HAWLEY PULP & PAPER COMPANY'S SECOND ANNUAL FOREMEN'S HI-JINKS the tables were arranged in the form of the company's trade-mark, an "H" within a triangle.

Hawley Stages Second Annual Foremen's Hi-Jinks

● The Hawley Pulp and Paper Company held its second annual Foremen's Hi-Jinks at the Aero Club in Portland on Friday night, March the 3rd, with 160 persons present.

The toastmaster of the evening was Carl E. Braun, vice-president and mill manager. He presided at the head table which was set before tables arranged for the foremen and guests in the shape of the Hawley trade mark, an "H" within a triangle.

The assembly gathered at 7:00 o'clock, and after refreshments, enjoyed one of the Aero Club's well-known steak dinners. The ballroom was suitably decorated and the tables were covered with Hawley products. Prnited Cheviot meat wrap was used for table-cloths and there were paper napkins appropriately printed for the occasion. Place cards consisted of small rolls of Hawley bleached toilet tissue, printed with a label bearing the name of the foremen or guest.

In addition, each guest was presented with an envelope containing various samples of Hawley products.

During the evening, entertainment was provided by a number of vaudeville acts, orchestra music, etc. One of the high-lights of the evening was the presentation of a special roll of newsprint to Vernon Scott, mechanical superintendent for the Oregon Journal. Carl Braun announced that Mr. Scott had called for quick delivery of a roll of special newsprint, but that limitations of time prevented its delivery earlier in the day. Consequently, the trucking company was requested to deliver the roll to Mr. Scott on the banquet floor. The toastmaster asked Mr. Scott to take delivery there and open it in the presence of the Hawley foremen and guests. Upon opening the roll of newsprint, Mr. Scott, as well as the assembly, was surprised to find that the newsprint roll contained no newsprint but a chorus girl.

● Mr. Braun called on a number of the company officials and foremen for remarks during the evening. Among them was John H. Smith, better known as "Jack" Smith, executive vice-president and general manager.

Tickets for the occasion were printed with a series of photographs between the covers, illustrating the various operations within the Hawley Pulp and Paper Company mill. The invitations sent to guests were modeled upon a clever idea, using Hawley Cheviot paper, the front cover of the folder bearing the inscription "for men only."

In addition to the table decorations the ballroom was decorated with dummy news rolls which were labeled for the Oregonian, the Oregon Journal, the News Telegram and the Oregon City Banner Courier.

The committee which arranged the party, had Louis W. Smith as chairman. Carl E. Braun was toastmaster, while tickets and finances were handled by Martin Lindle and Sam Hodges. Entertainment was arranged by Kenneth G. Urfer. In charge of refreshments was Jack Reddaway, Lionel Malley, Vernon Tipka, and Ed Smith. Decorations were arranged by Harold Lent and Jack M. Schmidt.

This is the second such annual event staged by the Hawley Pulp and Paper Company for their foremen. Not only were the foremen invited, but a large number of allied tradesmen joined in the celebration. This annual gathering is becoming an institution within the industry.

The following Hawley men attended the second annual Hi-Jinks:

● **C. E. Ackley,** general superintendent; **Carl E. Braun,** vice president and mill manager; **R. G. Bittner,** machine shop; **John Bloom,** wood mill; **Jack Byrne,** office; **Frank Baker,** cylinders; **Jack Carter,** boss machine tender; **Louis Coleman,** office; **Cleve Caldwell,** ground wood; **Charles Curry,** paint; **Harry Chandler,** storekeeper; **William Cannon,** plumbing; **Lee Coblentz,** shipping.

Ed Dempster, groundwood superintendent; **Alex Daue,** groundwood; **Art Dyet,** millwright; **Harry Ewing,** warehouse; **John Frank,** sawmill; **Henry Fischer,** wood buyer; **Joe Foley,** boss machine tender; **H. Fromong,** statistics; **Charles Fox,** time office; **Bill Freeman,** finishing.

Gene Good, shipping; **Sam Hodges,** shipping; **Clyde Helsby,** finishing; **Ivan Hoskins,** electrical; **Leo Howell,** printing department; **Henry Hauck,** groundwood; **Sid Hamilton,** groundwood; **George Holschue,** groundwood; **Leo Herzog,** sawmill.

L. Johnson, chemist; **Joe Jenkins,** beater engineer; **J. Kerzel,** engineering; **George Kalb,** groundwood; **Bill Kennedy,** converting; **Dan Lyons,** office; **E. Logsdon,** boss machine tender; **M. R. Lindle,** office (treasurer); **Les Lloyd,** log buyer; **Harold Lent,** sample department; **Walter Lindstrom,** paymaster.

• **Carl Mielike,** yard foreman; **John Meyers,** finishing; **L. Malley,** purchasing; **C. A. Mott,** office; **Claude Main,** groundwood; **Austin Nickels,** boss machine tender; **Case Newhouse,** finishing; **Fred Patnaude,** yard; **William Puckett,** shipping; **Jack Reddaway,** steam engineer; **Glen Russell,** machine millwright; **A. Rittenhouse,** machine shop; **Mal Reibhoff,** shipping; **W. B. Rhodes,** groundwood.

John H. Smith, executive vice president and general manager; **Carl Sholdebrand,** sulphite superintendent; **Tom Swift,** steam; **W. Sanetel,** finishing; **L. W. Smith,** converting and printing; **George Spencer,** sawmill superintendent; **Jack Schmidt,** office; **Ed Smith,** samples; **William Sullivan,** office; **Ernest Schweitz,** plant engineer; **Roy Sidor,** sulphite mill.

Vern Tipka, research; **Pete Tuttle,** sales department; **Vic Thomas,** warehouse; **C. Triplett,** laboratory; **K. G. Urfer,** personnel manager and safety supervisor; **Jim Wilson,** assistant mill manager; **Fred Weleber,** chief chemist and beater room superintendent; **Harry Wheeler,** groundwood; **Bruno Weber,** office; **Fred Westmeyer,** office; **George Watts,** lubrication; and **John Wehling,** converting department.

Piquette Named U. S. Gypsum Manager

• H. E. Piquette was recently appointed manager of the U. S. Gypsum Company's plant at Southgate, Calif. Mr. Piquette succeeds Grover Williford. Mr. Piquette was formerly with the company at its plant at North Tonawanda, N. Y. Having lived in California previously for several years, he is no stranger to the west and like three-fourths of the California population can claim being "almost" a native son.

Kittell Appointed Manager Dixie-Vortex Plant

• H. A. Kittell was recently appointed manager of the Southgate, California, plant of the Dixie-Vortex Co. He succeeds Verne Mahoney who has been transferred to the Portland office of the company in the sales and service division.

Pioneer Completes Solid Fiber Plant

• The Pioneer Division, the Flintkote Company, has completed the building of its new solid fiber container unit, which is being added to the present Los Angeles plant of the company. The new building contains 100,000 square feet of floor space and will have a complete solid fiber board container manufacturing lay-out.

SNAPS TAKEN AT THE HAWLEY HI-JINKS

In the top picture, left to right, VERNON SCOTT, Mechanical Superintendent of the Oregon Journal; CHARLES ACKLEY, General Superintendent, Hawley Pulp & Paper Company; Z. A. WISE, President of Griffith Rubber Mills; CARL E. BRAUN, Vice-President and Mill Manager, Hawley Pulp & Paper Company (toastmaster); GORDON LAW, Business Manager, Oregon Journal; H. SHOWERS, Mechanical Superintendent, News-Telegram; JIM WILSON, Assistant Mill Manager, Hawley Pulp & Paper Company.

In the middle picture, KENNETH URFER, Safety Supervisor and Personnel Manager, Hawley Pulp & Paper Company; E. R. BROWN, Oregon Safety Council; CARL SHOLDEBRAND, Sulphite Superintendent, Hawley Pulp & Paper Company; and VERNON SCOTT.

In the lower picture, CARL E. BRAUN, GORDON LAW, H. SHOWERS, JIM WILSON, JOHN E. BROWN, Associate Editor of Pacific Pulp & Paper Industry; FRED WELEBER, Chief Chemist and Beater Room Superintendent, Hawley Pulp & Paper Company.

An idea had to be threshed out...

...Collaboration with VAUGHAN engineers solved the problem...

The Screen Vat shown here is now efficiently performing its full duty in one of the large pulp mills of the Northwest.

★ ★

Today it is actual *reality;* but months ago it was only a *complex group of ideas* in the minds of practical engineers.

★ ★

The mill engineers knew what they wanted to accomplish. They also knew just what had to be manufactured to do the job.

Vaughan engineers were brought into the picture; various opinions were submitted and discussed; and construction work begun after all ideas were correlated into a practical, approved design.

The job was done, and the result has pleased all concerned. Such is the short story of another Vaughan achievement in collaboration with mill engineers.

May we collaborate with you to help solve your mechanical problems?

VAUGHAN Precision Made VALVES

VAUGHAN MOTOR COMPANY • Ph. EA 1108 • 835 S. E. MAIN • PORTLAND, OREGON

Association Holds 62nd Annual Meeting

D. Clark Everest Reelected President of American Pulp & Paper Association — J. D. Zellerbach Renamed a Vice-President

● The American Paper & Pulp Association held its 62nd annual meeting at the Waldorf-Astoria in New York City, February 20-24th. Affiliated associations likewise met at the same time, including the United States Pulp Producers Association and the Technical Association of the Pulp & Paper Industry.

D. Clark Everest, president of the Marathon Paper Mills Company of Rothschild, Wisconsin, was reelected president of the American Paper & Pulp Association, and J. D. Zellerbach was reelected a vice-president. Mr. Zellerbach is chairman of the board of Fibreboard Products, Incorporated, president of Crown Zellerbach Corporation, and executive vice president of Rayonier Incorporated.

Other vice-presidents are: W. H. Anders, Nashua River Paper Company; D. K. Brown, Neenah Paper Company; Hugh J. Chisholm, Oxford Paper Company; Stuart B. Copeland, Northwest Paper Company; R. J. Cullen, International Paper Company; R. K. Ferguson, St. Regis Paper Company; Ralph A. Hayward, Kalamazoo Vegetable Parchment Company; H. L. Jenkins, George O. Jenkins Company; J. L. Riegel, Riegel Paper Company; John R. Miller, West Virginia Paper Company; F. J. Sensenbrenner, Kimberly-Clark Corporation; and Norman W. Wilson, Hammermill Paper Company.

Charles W. Boyce, was reelected executive secretary of the association.

In his address to the members of the association who were present, Mr. Everest gave in outline the history of the association (stating incidentally that he had attended the last thirty annual meetings), its growth and development along lines of best serving the pulp and paper industry by directly serving the individual companies who are members.

● "We may, of course, hope for revision and liberalization of government restrictions upon business," said Mr. Everest, "but we cannot count on it. In the long run we must be prepared to carry on as our major group work the educational processes that we have followed for more than half a century. The manner in which we do it and its extent will depend upon whatever business laws there may be on the statute books from time to time. . . ."

"It is through cooperative study, capably staffed, that this industry which in many of its characteristics is still young, can remain young," said Mr. Everest in concluding. "More and more I believe we must look to a formulation of industry experience and thought for the basis of the type of management which we will need in the future."

Pulp Producers Reelect Officers

● At a meeting of the United States Pulp Producers Association in February, Amor Hollingsworth was reelected president. Mr. Hollingsworth is president of the Penobscort Chemical Fibre Company of Great Works, Maine and of Tileston & Hollingsworth Company of Boston.

Robert B. Wolf, general manager of the Pulp Division, Weyerhaeuser Timber Company, Longview and Everett, Washington, was reelected vice-president of the association.

D. CLARK EVEREST, Reelected President of American Paper & Pulp Association

Oliver M. Porter was reelected secretary-treasurer.

TAPPI Reelects F. C. Clark

● At its 24th annual meeting, held in the Hotel Roosevelt, New York City, February 20th-24th, the Technical Association of the Pulp & Paper Industry, reelected Frederick C. Clark as president. Mr. Clark is a consultant and lives in Newton, Massachusetts.

W. H. Swanson of the Kimberly-Clark Corporation, Kimberly, Wisconsin, was elected vice-president. New members chosen to the executive committee for the next three years were: R. C. Griffin of Arthur D. Little, Inc., Cambridge, Mass.; Vance P. Edwards, International Paper Company, Palmer, N. Y.; F. D. Libby of the Kalamazoo Vegetable Parchment Company, Kalamazoo, Michigan; and H. H. Harrison of the Crystal Tissue Company, Middletown, Ohio.

AMOR HOLLINGSWORTH, Reelected President, United States Pulp Producers Association

ROBERT B. WOLF, Reelected Vice-President, United States Pulp Producers Association

J. D. ZELLERBACH, Reelected Vice-President, American Paper & Pulp Association

**Dick Wade, head of Inspection Department*

1/10,000 of an inch is important to Dick!

1/10,000 of an inch is just about 1/30 the diameter of a human hair. Most of us will never have to worry about such a small measurement, but Dick Wade* of the Bingham Pump Company makes it his business to worry about minute fractions of an inch every day.

The boys at Bingham Pump Company have a lot of respect for Dick because, for one thing, he's a first class tool and die maker—and that means the highest type of precision workmanship! Dick isn't making tools and dies for the Bingham Pump Company, but he is checking every part and piece of material that goes into Bingham pumps with the same precision he used in making tools and dies.

Dick has a little star about a quarter of an inch in diameter that he stamps on parts passing his inspection. When you find that star on a piece of material, you'll know it has been micrometered and tested for the job it has to perform. That is one of the reasons you never hear of a Bingham pump being shut down because of a part defect.

No matter how important it is to speed a job along, or how anxious the shipping department is to get an order out, they cannot move until Dick says, "OK boys, she's ready." Sometimes the "OK" is a long time coming, not because Dick is slow, but because it takes time to be positive everything measures up to Bingham standards.

There are times when Dick has to work nights to keep inspections abreast of production, but whether it takes night or day work you'll find him on the job, watching, and checking to make certain every piece of material used is of the highest quality. You may never meet Dick because his inspections keep him in the shop all of the time, but if you do, you'll understand why Bingham pumps are better made with better materials and operate more efficiently.

We've talked a lot about Dick, but only because he is head of the inspection department and represents the kind of Bingham craftsmen who believe that only by precision workmanship can finer pumps be made. Because of Dick and the other craftsmen at Bingham's we believe that we can honestly say, "You'll get more than your money's worth from a Bingham Pump."

Bingham Even-Flow pump that cannot become air-bound. Used to handle white water or stock containing large quantities of entrained air without reduction in capacity or interruption in service.

Bingham

705 S. E. MAIN STREET
PORTLAND, OREGON

PUMP COMPANY

DISTRIBUTORS IN LEADING CITIES OVER THE UNITED STATES

An Analysis of the 1938 Wood Pulp Market Situation

Excerpts From an Article by O. F. Swanson, Sales Manager for J. Andersen & Co., and the Pulp & Paper Trading Co., Appearing in the February 23rd Issue of the Paper Trade Journal

• Each year O. F. Swanson, sales manager of J. Andersen & Company and the Pulp & Paper Trading Company of New York, importers of foreign pulp, summarizes the previous year's pulp situation for the convention number of the Paper Trade Journal. This year, in the February 23rd issue, Mr. Swanson presents an analysis of 1938 developments in wood pulp that is of real interest to every American pulp manufacturer and to every employe of a pulp mill in the United States.

In his analysis of the market troubles of the past year Mr. Anderson is fair in his judgment. Domestic producers are likely to expect an importer of foreign pulp to be prejudiced in his market views, and an importer is just as likely to think that domestic producers are biased in their market opinions.

Perhaps PACIFIC PULP & PAPER INDUSTRY thinks Mr. Swanson is fair in his analysis because he does not hesitate to present a picture which in our opinion shows that foreign pulp producers were important contributors to the instability of the pulp market in 1938.

Space does not permit the quoting of Mr. Swanson's entire article. A few highlights will be mentioned to provide a general idea.

• "The story of the 1938 wood pulp business," says Mr. Swanson, "resembles that of 1920-1921, insofar as all of us, affiliated with the business, were again called upon to atone for our unpremeditated sins, and to make retribution for alleged activities to assist in the "anticipated killing" which began two years ago or thereabouts. No particular group connected with the industry should be given either credit, or blame for what took place at that time, nor for resultant events because we were all contributing in one way or another and participated more or less willingly, buyers included, by their attractive offerings in the spree which brought about those perplexing problems of last year. According to old records, prices on wood pulp in 1920 reached record-breaking levels, and the then unprecedented rise in prices, and subsequent drop later, was primarily attributed to the unsettled monetary situation throughout the world.

"This, however, was not the cause of the sharp upswing in 1936 and early 1937, for which some hindsight critics claim the pulp manufacturers are solely responsible and, consequently, also for the collapse of the price structure during 1938. Be that as it may, but to my own way of thinking, and I say this without fear of much contradiction, the pulp sellers regardless of their individual positions in the trade, were ably assisted during the heydays by environment to create the primary causes for the unstability of the price situation the last two years. **In this connection, it should be pointed out that the domestic suppliers of chemical pulp never permitted themselves, and wisely so, to be either up in the clouds, or down at rock bottom during the last tidal wave. They concentrated on finding a happy price medium, and succeeded remarkably well in this respect.**

"While good progress has already been made to iron out the difficulties caused by the high prices of a year and a half or more ago, it would be unreasonable to expect a perfect score from the buyers' point of view, although many sellers have taken it on the chin for some time past, in order to assist their customers to meet competition in their markets. This they have done without making any fuss about it, and are still watching this situation carefully, endeavoring to arrive at a satisfactory solution to all concerned. The dizzy height to which prices soared in 1936-1937 was too great for a comfortable and dignified descent, judging from the rough going on the downward path but, at that, we have finally landed at what appears to be the bottom, fairly safe and sound, with the exception of a few painful bruises, and a little subdued feeling perhaps.

"Despite the increased consumption the second half of the year, compared with the first, it had no beneficial effect, whatsoever, on prices, which continued to decrease gradually, on spot business, and contrary to expectations, the lowest point was reached at the end of the year. **This, in itself, is sufficient to prove the next to chaotic conditions of the price situation on imported pulp, and could also be taken as an indication that the pulp market in general has for sometime past been in a more or less topsy-turvy condition.** However, last year certainly did not permit "padding" of orders—definitely not—because most of the buyers' requirements were well taken care of by the effective though somewhat unpopular procedure of readjusting contracts, coupled with additional tonnage, and all at greatly reduced prices. On this account, it was almost impossible to close any strictly new business, except for lesser quantities and then, as a rule, only at bargain prices or in connection with special inducements of some sort. . . .

"The tenacity with which the year carried on its tantalizing grind throughout the entire twelve months is beyond comprehension and, under the circumstances, it would seem that the need of the hour is for fair prices to all concerned at all times. It goes without saying that they were much too high in 1936 and early in 1937 and, by the same token, too low at the moment, on all grades of chemical pulp. Until this important question has been settled, it is safe to predict that no widespread and lasting progress in the policies of selling or purchasing can be anticipated, and **the range of price fluctuation on imported pulp should be reduced to that of domestic pulp."**

Mr. Swanson then points out that no method has as yet been discovered for controlling the price fluctuations and urges the men in the industry to work together to try and find a solution.

Again quoting Mr. Swanson. "The past year has been far from lenient with anyone in the pulp business, in which respect it ran true to form, based upon past experience of numerous previous years and, on this account, we have today plenty of skeptics in the trade, many of whom are utterly confused as to what the future holds. **Perhaps another reason for this feeling of apprehension in some quarters is the conclusive demonstration of last year that even the regarded long heads, or master minds, accredited with unusual intelligence, and abundance of experience, are also far from infallible in their judgment and predictions. . . .**

Mr. Swanson comments on self-sufficiency as follows:

• "That the universal trend toward national self-sufficiency in wood pulp and especially so, with regard to kraft pulp no longer is a saga, but an established fact, should not be ignored, or even taken lightly by manufacturers of these commodities in other countries, if they intend to continue supplying old customers here with a fair portion of their requirements but to reckon on the same

O. F. SWANSON,
A broker views the pulp situation

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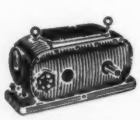
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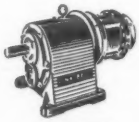
MOTORIZED REDUCER

WORM GEAR REDUCER

LINK-BELT

SILVERSTREAK SILENT CHAIN DRIVES

brisk demand for imported unbleached kraft pulp as in the past would be expecting too much. On the other hand, bleached kraft pulp in various degrees of whiteness, has grown in popularity during recent years, and is gradually displacing sulphite pulp in some instances because of its greater strength and steady improvement in quality. It is safe to predict a much better future for this pulp than for imported unbleached kraft pulp, the outlook of which is none too bright in this market, although it will be used regularly in certain sections. . . ."

Concerning the difficulties created by congested shipments, Mr. Swanson has this to say: "For several years past ports on the Great Lakes have received large cargoes of both domestic and imported pulp, and last year was no exception in this respect. Available figures indicate that in the aggregate deliveries in excess of two hundred thousand tons were made to these ports in 1938 and although this is a drop of about 25 per cent in 5 years, this diverted tonnage no doubt ameliorated the congested condtiions at Atlantic ports, some of which declared their inability to store further cargoes. Albany also announced that it was in the same predicament. At the time of writing this situation has not altered greatly, and is still a disturbing factor to both sellers and buyers. **Hence, it is to be hoped that suppliers abroad do not anticipate shipments against contracts as, by so doing, they would aggravate the situation and, perhaps, incur heavy additional expense. . . .**

"The delivered cost of pulp from the various producing regions is fairly accurately arrived at by adding transportation charges to the cost of manufacture. Obviously, the lowest delivered price in any region is apt to govern the price structure there, and sellers with higher freight rates, must necessarily make corresponding allowances to obtain their share of the business. In bleached sulphite pulp, the Pacific Coast appears to have the advantage over other regions, both with regard to actual cost and quality for general use, although individual pulp mills in other territories probably make equally as good, or even better qualities but, undoubtedly, at higher costs.

"The sulphate industry of the South has attained a commanding position in this field and, while the tonnage of southern pulp allocated for sale to the so-called converting mills in the future might not be as large as expected some time ago, the southern competition is exerting great influence in this branch of the industry, not only by its tremendous tonnage of finished products, but also in a lesser degree with the aid of its sales of pulp. Insofar as wood costs can possibly dominate the cost of pulp, the southland probably rules supreme."

(The emphasis placed on certain parts of Mr. Swanson's article are ours—Editor.)

●

McMaster Says Northwest Is Place to Make Pulp

● The Pacific Northwest offers the greatest scope for future expansion of the pulp industry, in the opinion of A. E. McMaster, of Vancouver, for more than fifteen years an executive in the paper trade on this coast, as general manager of Powell River Company, managing director of Nootka Wood Products, Ltd., and with Whalen Pulp & Paper Company in the early days.

Addressing the foreign trade bureau of the Vancouver Board of Trade, March 10th, Mr. McMaster enumerated the advantages possessed by British Columbia and the Northwest states—water and waterpower, tidewater mill sites and labor supply, and told how production of pulp had gradually shifted westward. So far as British Columbia was concerned, pulpwood and saw timber occurred in the forest in almost equal proportions, yet cutting was on the basis of 80 per cent saw timber and 20 per cent pulpwood, resulting in large areas of pulpwood being left intact for future expansion of the industry.

"The fact that our Northwest ports are at tidewater with open ports all the year round and with the availability of frequent sailings of deepsea ships clearing from our main ports to practically all the principal markets of the world gives us an opportunity for wider diversification of markets than the eastern mills," said Mr. McMaster.

Much will depend on restoration of the Oriental markets, said Mr. McMaster. Exports from British Columbia last year showed a decrease of 28 per cent compared with 1937 due to general decline in consumption but primarily because of the collapse of the Oriental markets. The great United States market would cotninue to be British Columbia's most important outlet, Mr. McMaster said, but he believed that Japan would re-assert itself as the second best field, with the United Kingdom, France, Belgium and other European countries in a subordinate position.

Mr. McMaster contended that the Scandinavian countries—Sweden, Norway, Finland—would continue to furnish the most severe competition for the Pacific Northwest due to the high efficiency of their mills and low labor costs. Chief advantages in the face of that competition were the Northwest's cheaper raw material and accessibility to the great potential consuming territory in the United States and the Far East.

● But Mr. McMaster emphasized that in addition to cheaper labor, Scandinavian transportation costs were less. North European pulp and paper producers could deliver to Atlantic ports at two to three dollars a ton less than the Northwest could by water from the Pacific coast. Then there was the European advantage in monetary exchange. Assuming Canadian exchange at par with the United States, the Scandinavians had an exchange advantage on bleached sulphite of nearly $4 a ton over both Canadian and United States manufacturers.

Explaining what he described as a "world's woodpulp balance sheet," Mr. McMaster pointed out that the United States, although showing the greatest imports of wood pulp—almost 2,500,000 tons, was also the greatest producer and took first place in consumption. Exports from the United States were comparatively small and consisted chiefly of bleached sulphite shipped to Japan, the United Kingdom and Europe.

Canada stood second on the list in both production and consumption. The imports were negligible and Canada was third in exports. However, Canada was the world's greatest producer of newsprint and the greatest exporter of that product.

In point of consumption Germany came third, but stood fourth in production, sixth in imports and seventh in exports. Germany headed the list in imports of raw pulpwood with the exception of the United States, having imported over 1,000,000 cords in 1937, largely from Russia and the Balkan countries.

In consumption Great Britain stood fourth. While her production of woodpulp was negligible, as an importer the country stood second only to the United States. She had no exports of wood pulp, but did export a considerable quantity of newsprint to Australia and New Zealand, where the Empire preference offered an advantage.

Japan was fifth as a consumer and while a heavy producer she stood seventh as an exporter and fourth in point of exports, almost entirely in the chemical grades. France was sixth in consumption, third in imports. Her exports were negligible and her production was down tenth on the list of principal countries in the industry.

Sweden was a heavy producer of wood pulp, second only to the United States and Canada, and leading the world in export of woodpulp. Swedish imports were negligible, and she stood seventh among the consuming countries. Like Canada, her home consumption was comparatively small, although Sweden shipped a great deal of newsprint. Russian statistics were not dependable, but consumption placed the country about eighth in the list. Finland and Norway's position was proportionately similar to Sweden, although combined production and combined exports just failed to equal the huge figures of Sweden.

Mike Buckley Married On St. Patrick's Day

● R. M. "Mike" Buckley, secretary to Ossian Anderson, executive vice-president of the St. Regis Kraft Company of Tacoma, was married on March 17th to Miss Ruth Hansen of Tacoma.

Barber Returns From Eastern Trip

● W. R. Barber, research director and head of the Central Technical Department of the Crown Zellerbach Corporation, returned to Camas March 8th after an extended trip through the East. He attended the TAPPI convention at New York, spent some time at the corporation's mill at Carthage, and visited the Institute of Paper Chemistry at Appleton, Wisconsin.

Schoenwerk to Visit Coast This Month

● Otto C. Schoenwerk, pulp and paper mill engineer, was scheduled to arrive in Longview on March 13.

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This is true in many fields of endeavor . . . with paper mill machinery, for example. The new speed and dependability obtained with Black-Clawson and Shartle Brothers products are due directly to the research conducted by this organization. B-C-S designers and engineers are constantly busy . . . investigating new ideas . . . working them into shape . . . testing them to determine their worth.

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January Pulp Imports 17% Higher than Year Ago

● Total wood pulp imports for the month of January, 1939, were 170,586 tons valued at $6,585,394. This was 10 per cent below December, 1938, imports but 17 per cent greater than the tonnage imported in January, 1938.

Imports of bleached sulphite pulp totaled 35,170 tons in January, 13 per cent lower than in December. 1938, but 76 per cent higher than for January of 1938.

Unbleached sulphite pulp imports totaled 59,379 tons in January of this year, 11 per cent below December imports and 2 per cent less than the imports for January a year ago.

Unbleached sulphate pulp imports totaled 49,319 tons, valued at $1,635,111, were 9 per cent less than the December, 1938, imports but 24 per cent higher than the tonnage imported during January, 1938.

Imports of the single most valuable item on the paper and paper base stock schedule, newsprint, totaled approximately 184,000 tons, valued at $7,976,267. These were 12 per cent lower in quantity than for December, 1938, and slightly lower than for January a year ago.

Cigarette paper imports, second most valuable item on the paper schedule, increased 7 per cent over December and 5 per cent over January, 1938, with a quantity of 1,369,588 pounds, valued at $335,734.

Exports Drop 60% Below January 1938

● Exports of paper and paper base stocks during January, 1939, declined in comparison with the previous month and in comparison with January, 1938, according to preliminary figures released by the Pulp and Paper Section, Forest Products Division, Department of Commerce. Paper base stocks with a January value of $371,525 were approximately 90 per cent under the previous month aggregate and 60 per cent under the total exported during January, 1938. Exports of paper and its manufactures, valued at $1,937,780 in January, declined about 13 per cent from December and 11 per cent from January, 1938.

Imports of paper and paper base stocks, totaling $16,045,897 during January, were 17 per cent below the previous month's imports, but about 3 per cent higher than the corresponding month of last year. The rise, by value, in imports is due mainly to the higher price of newsprint for the first 6 months of 1938. A small portion of the Canadian mills had contracts to supply newsprint at slightly lower prices than those now prevailing.

Exports of bleached sulphite pulp, formerly the chief item by value in the paper and paper base stock schedule, were well under the previous month's total. Exports aggregating 1,256 tons of bleached sulphite, rayon and special chemical grade, a new breakdown, and other bleached sulphite pulp totaling 205 tons, when combined, are 96 per cent under the total bleached sulphite exports during December, 1938, and about 80 per cent under the January, 1938, total.

Exports of kraft pulp, another new item on the export schedule, shipped entirely to the United Kingdom, totaled 1,166 tons, valued at $46,639. Prior to this year kraft pulp was included in "Other Wood Pulp." If the old breakdown were used, and kraft pulp included in other pulp, exports of this class jumped over 300 per cent as compared with December and almost 60 per cent over January, 1938.

● It is noteworthy that the value of exported pulp has declined even faster than the tonnage. In January, 1939, for example, 3,255 tons of unbleached sulphite pulp, valued at $111,004, were shipped from this country, while for the same month last year a smaller quantity, 2,213 tons, was valued higher, at $135,894.

Exports of uncoated book paper, valued at $107,000 during January, with a total quantity of 1,885,150 pounds, increased 6 per cent by quantity over December, and approximately 75 per cent over the exports of this commodity a year ago. Canada was our best customer for this commodity, in January taking 589,983 pounds. Cuba, Philippine Islands and China ranked next, in that order, and with Canada consumed approximately 80 per cent of the total.

Kraft container board, another new item on the export schedule, reached a value of $126,220, with a quantity of 6,175,168 pounds, during January. The United Kingdom took approximately 60 per cent of this sum and Mexico the majority of the remainder. This item formerly was classified under "Other Boxboard."

Exports of greaseproof and waterproof papers during January totaling 455,512 pounds, valued at $107,843, were 20 per cent higher than in December, but 30 per cent below the amount exported in the corresponding month in 1938. Canada, taking 179,841 pounds, was our chief consumer of this group of paper.

Surface coated paper exports rose 12 per cent in January compared with the previous month and were 6 per cent ahead of the corresponding period in 1938. January, 1939, data show an export of 760,231 pounds, valued at $103,316. Canada, Cuba, and the Philippine Islands were our major purchasers of surfaced coated paper.

Other items which marked an increase in trade during January over the corresponding month last year, with the January, 1939, quantity in parenthesis, were overissue and old newspapers (12,656,665 pounds); kraft wrapping paper (605,927 pounds); tissue and crepe paper (1,574,550 pounds); toilet paper (643,511 pounds); paper towels and napkins (399,553 pounds); bristols and bristol board (154,993 pounds); sheathing and building paper (1,164,140 pounds); fiber insulating board or bat (3,134,068 square feet); wallboard of paper or pulp (1,124,049 square feet); blotting paper (245,371 pounds), and envelopes (80,385 pounds).

California Liberalizes Unemployment Insurance Law

● The California legislature has passed Assembly bill No. 963, which reduces the waiting period for unemployment insurance benefits from four to two weeks, and predicates payment on a basis of one instead of two years of earnings.

Under this system, the claimant will receive benefit checks starting in the fifth week instead of the seventh. The law also liberalizes certain features, such as in giving increased benefit payments.

Ballantyne to Represent Western Gear in Portland

● Thomas J. Bannan, vice-president of the Western Gear Works of Seattle, has announced the appointment of W. G. Ballantyne as the company's representative in the Portland territory.

Mr. Ballantyne, who will make his headquarters at 610 Lewis Building, Portland, has had twelve years experience in power transmission and material handling work in and around Portland, and is well known to industrial buyers.

He will represent Western Gear Works' full line of speed reducers, parallel shaft-right angle-vertical, made with herringbone, helical, spur, bevel, spiral bevel or worm gears. Western also produces all types of cut gears and does special machine work.

Everett Installs Two Cameron Winders

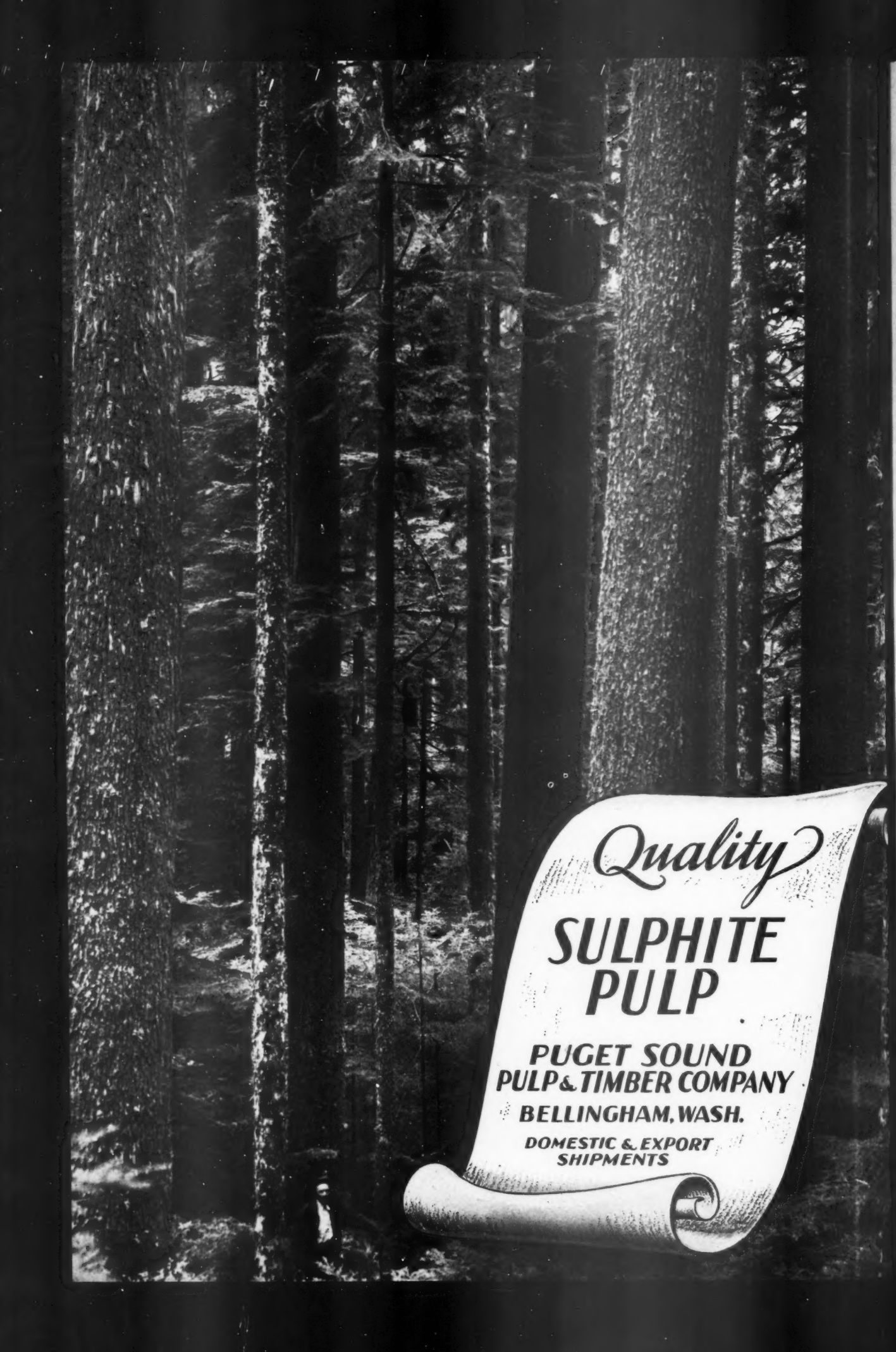
● The Everett Pulp & Paper Company of Everett, Washington, has installed Cameron winders on No. 1 and No. 2 machines. The Cameron Machine Company of Brooklyn, N. Y., is represented on the Pacific Coast by the Pacific Coast Supply Co.

German Paper Machinery For Shanghai Mill

● Orders have been placed in Germany for the purchase of equipment capable of producing 5 tons of newsprint paper daily, to be installed in the new Min Foong Paper Mill. The mill, which will have a capital of 1,400,000 yuan (yuan equals $0.1617 United States currency), was organized by Shanghai business and banking interests. The plant will be located in Kunming. (Office of the American Commercial Attache, Shanghai).

Shanghai Paper Merchants Suffer Heavy Losses

● Shanghai paper merchants suffered heavy losses on their 1938 business, according to a report received from the office of the American Commercial Attache in Shanghai. One large importing house in Shanghai estimated that the 1938 sales averaged only 1.7 per cent of those recorded for 1937. Much business in the early part of the year was lost to importers and dealers for the reason that stocks on wharves and in warehouses in the Japanese occupied section of the city were not made accessible until April. Many printing establishments were closed or destroyed or moved to Hong Kong or the interior. Hong Kong merchants profited in the first half of the year by virtue of their contact with the interior over the Canton-Hankow Railway. The cutting of communications with the interior and the fall of Hankow in October found them with abnormally heavy stocks of paper purchased at prices higher than those at that time prevailing in world markets. Thus neither Shanghai nor Hong Kong dealers were in good shape at the beginning of 1939. In Japanese controlled areas sales of American bond and banknote papers and also general lines have come to a full stop, replacements being made from Japanese and German sources. (Office of the American Commercial Attache, Shanghai.)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Urges Industry Development As National Defense Measure

● In a recent interview given to the press by Donald R. Brewster, field director of the Herty Foundation of Savannah, Georgia, in connection with the foundation's campaign to persuade each southern state to contribute $10,000 to the support of the Foundation's research laboratory, he said in part:

"Another sound reason for southern pulp and paper mill expansion within the next few years is the prospect that foreign supplies of pulp and paper upon which we now depend for a substantial part of our national needs, may no longer be available in sufficient quantity to meet those needs."

Mr. Brewster gave the figures to show what a good gamble the $10,000 would be which is being asked of each of the ten Southern states for support of the Herty Foundation Laboratory in its work to find better and cheaper methods for making white paper from Southern woods.

● "Our proposition is essentially an investment and not just another expense for the taxpayers to bear," the field director stated.

"It is almost certain that each Southern state will get at least one white paper mill out of the forty or fifty mills that will probably be built in the South in a few years.

The important place the laboratory plays in the starting of a mill, Mr. Brewster pointed out, is the technical assistance in both design and operating problems.

"If the Herty Foundation Laboratory had not been available for just such service in connection with the Lufkin mill," he stated, "it is doubtful if the project could have been brought to completion. In any event, its progress would have been much slower and more uncertain."

Mr. Brewster recently returned from Chapel Hill, N. C., where he spoke before the North Carolina Press Institute at the University of North Carolina on "New Wealth From Pulpwood." He said he received a very favorable response from the North Carolina publishers, and all were anxious for the State Legislature to appropriate funds to aid in the financing of the laboratory.

"Very favorable response has been received from the newspaper publishers and business men in all of the Southern states the legislatures of which meet this year," the field director stated, "and all have indicated a general desire to support financially the work of the Herty Foundation Laboratory. I am yet to receive an unfavorable response. Dr. Herty certainly laid a wonderful foundation. The proposition sells itself."

Mr. Brewster said the Southern states, the legislatures of which meet this year, are North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Arkansas and Texas.

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Woodfibre Mill In Operation

● B. C. Pulp & Paper Company's Woodfibre plant continues in operation, manufacturing high grade bleached sulphite pulp for the United States market, but whether it will remain in permanent operation is still uncertain, according to President Lawrence Killam.

The company's Port Alice mill is still shut down and there is no immediate prospect of re-opening, says Mr. Killam, despite a slight improvement in the market situation.

Oscar Jorgenson, secretary of B. C. Pulp & Paper Company, is expected to return from the Orient late in March. He has been studying the market situation in Japan and China, where under normal conditions the company sells a large proportion of its output.

Harry Field Honored By Lindsay Wire Employes

● At his own request, H. H. Field has begun a period of semi-retirement from active duties at The Lindsay Wire Weaving Company, Aspinwall Avenue, Cleveland, manufacturers of fourdrinier and cylinder wires for papermaking. On February 10, the effective date, a testimonial dinner was tendered Mr. Field at the Cleveland Club, on which occasion a silver plaque was presented to him.

Harry Field went to work for Lindsay on June 12, 1905. In 1911 he was chosen a director; in 1916, secretary; in 1930, treasurer. He has seen the company's facilities grow from a one-story frame building to its present eight modern brick-and-steel buildings, and the capacity of its original four looms multiplied sixteen times.

Mr. Field relinquishes the title of secretary, remaining a director as well as treasurer. Other Lindsay officials are A. Fred Crossman, president, and Harry J. Smith, secretary.

Scott Paper Buys Bingham Pumps

● The Scott Paper Company of Chester, Pennsylvania, recently purchased all of the pumping equipment for their new mill supply pumping station from the Bingham Pump Company, Portland, Oregon. The new 25,000,000 gallon a day pumping station is located on the Delaware River and will be used to supply all the mill requirements, not only for the present mill but for new additions now being completed.

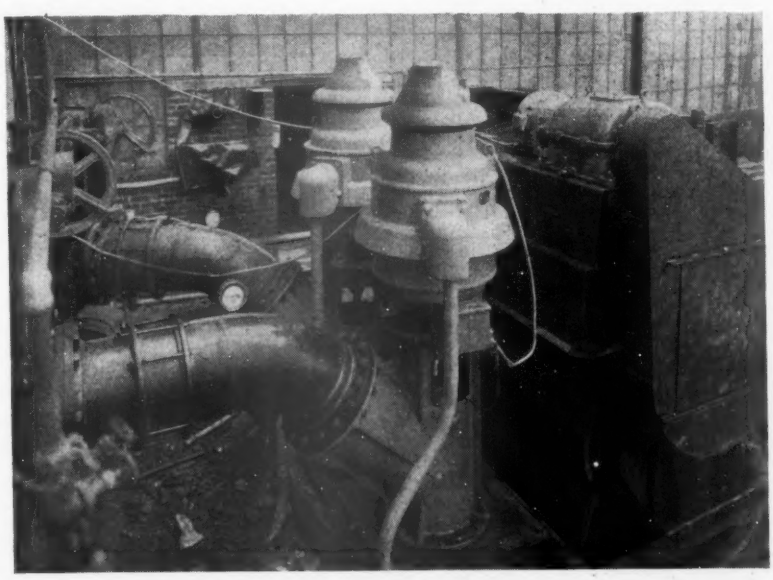
Because of certain head and capacity requirements, the Bingham Mixed-Flow type of pump was chosen by the Scott people. The Mixed-Flow is a recent development of the Bingham engineering department in which the desirable characteristics of the centrifugal and propeller types of pumps are combined. The result is a unit with exceptional high operating efficiencies with a minimum horsepower requirement. A feature of the pump is that it does not have a sharply rising horsepower curve as the head increases.

The installations of the Mixed-Flow are of the vertical type with the pumping element submerged under water. Due to the unpredictable water levels at certain seasons in the Delaware River, the motors are located above flood water levels.

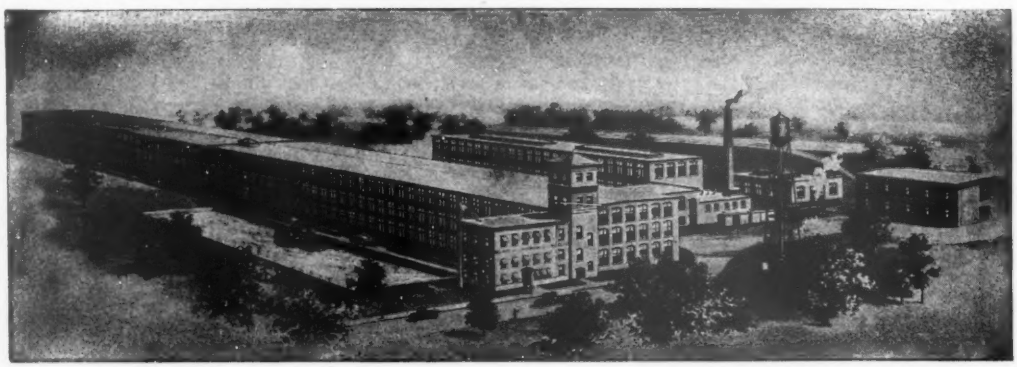
According to Randolph Bingham, president, "The Mixed-Flow is not a sensational pump but a definite step forward in the pumping industry. Where it is desirable to move large quantities of water the Mixed-Flow is particularly adaptable because of its highly efficient operation and low horsepower requirement."

Sholdebrand Joins Pacific Section TAPPI

● Carl Sholdebrand, sulphite superintendent of the Hawley Pulp & Paper Company of Oregon City, Oregon, joined the Pacific Section of TAPPI in February.



BINGHAM MIXED-FLOW PROPELLOR PUMPS used to pump the main water supply to the Scott Paper Company's large tissue mill in Chester, Pennsylvania ' ' ' The photograph was taken during the recent construction work.



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Wall Board
Soda Pulp
Sulphite Pulp
Building Papers
Asbestos Papers
Cement Shingles
Blotting
Book
Chip Board
News Board
Cover
Kraft
Ledger
Manila
Rope
Ground Wood Pulp
Binders Board
Toweling
Condenser Paper
Bottle Cap Board
Catalogue
Envelope
Container Board
Hanging
Coating Boards
Coating Papers
Tag Board

SPECIALIZATION

Ours is a specialized business—that of making *good* paper machine felts. It is different from any other textile business in the world.

Our designers, spinners, weavers, research chemists, finishers, are all specialists with years of sound experience in felt making. Some of them have followed their particular line of work for 25 years.

Machinery, too, is *special*. Much of it is of our own design.

Our resources and world-wide experience have led the paper industry to bring all manner of problems to us involving the use of felts.

If you have an unusual machine condition which is bothering you, let us know about it. Perhaps we can help you.

ALBANY FELT COMPANY

ALBANY, NEW YORK

Trade Talk

of Those Who Sell Paper in the Western States

Seaboard Paper Opens Branch in Los Angeles

● The Seaboard Paper Company, San Francisco's newest paper jobbing house, has opened a branch office in Los Angeles at 607 South Hill street, under the management of J. A. Oliver, according to an announcement by Harry Bean, vice-president and general manager of the company.

Seaboard Paper recently put out a most attractive price book, and Bean states that they have now lined up the major firms that they will represent. Business, incidentally, states Bean, is fine.

Paper Mill Men's Club Holds Valentine Luncheon

● Valentine's Day was celebrated by the Paper Mill Men's Club of southern California with a luncheon, meeting at the L. A. A. C. Some forty of the membership attended. Geo C. Wieman presided.

Features of the meeting were a talk by Roy Steckel, former chief of police of Los Angeles, and a bit of professional entertainment. Ex-Chief Steckel recounted his experiences while serving with the police department.

A new member of the organization was formally introduced, Sherman R. Hall, formerly of Oregon City, with the Hawley Pulp & Paper Company, and now associated with W. B. O'Malley in the Los Angeles office of that company.

Plans were discussed for the forthcoming Dividend Party and the date, March 9, officially set. The party will be held at the California Country Club. Frank Philbrook, chairman of the affair, announced that an excellent dinner is planned for this party with top notch entertainment to follow. Golf will prevail during the afternoon for those who engage in this ancient sport.

Zellerbach Paper Employes Plan Big Spring Dance

● Employees of the San Francisco, Headquarters, and near-by divisions of the Zellerbach Paper Company, are planning a big Spring dance to be held April 29. The event will probably take place in San Francisco's beautiful new Aquatic Park building.

Brenzel Tours Union Bag Plants

● G. S. Brenzel, resident manager of the Union Bag & Paper Corporation plant at Los Angeles, returned early in March from a business trip which included stops at the company's plants at Savannah, Ga., Hudson Falls, N. Y., and Chicago, Ill., and the company's offices in New York City.

Jack Rose Named Assistant Mgr. BM&T Wrapping Dept.

● O. W. Mielke, general manager, Blake, Moffitt & Towne, pioneer Pacific Coast paper concern, announced the appointment on March 5 of J. L. "Jack" Rose as assistant sales manager, wrapping department, San Francisco division. Rose will be assistant to L. C. Conner, manager of the department.

Rose was born in Hamilton, Ill., and attended school in that state. He started his career in the paper industry with the John Leslie Paper Co., spending five years with that organization. He then went with the McLellan Paper Co., St. Paul and Minneapolis, where he worked another five years.

At the end of that time Rose decided to come West and he joined Blake, Moffitt & Towne in 1930, where he has worked as a salesman ever since.

With this wide experience in paper business, and a knowledge of the requirements in the trade, Conner will find in Rose an able man to develop new sales potentialities and to assist the salesmen in the field.

Pell Entertains Another Adventurer

● Rodman Pell, Jr., president, Pelican Paper Company, San Francisco, entertained a distinguished house guest for a couple of weeks last month. The guest was Dwight Long, Seattle youth, who just completed a trip around the world in a 32-foot boat. The trip took four years.

The Pells first met Long some years ago in Tahiti when Pell was on one of his picture-making trips, and later renewed the friendship in New York.

Dewey Megel Now in Omaha

● Dewey Megel, former officer of the Paper Mill Men's Club of Southern California is now located in Omaha, Nebraska.

Wins Zellerbach 45 Year Pin

● Alma C. Lambert, Salt Lake City Division, Zellerbach Paper Company, received his 45 year service pin.

I. Zellerbach Returns From Paper Trade Meeting

● I. Zellerbach, chairman of the board, Zellerbach Paper Company, San Francisco, recently returned to his desk, following a trip East to attend the paper trade convention.

Del Monte Paper Meeting To Be Held May 11, 12, 13th

● J. W. Thompson, chairman of the 1939 Pacific Coast Paper Conference, issued on March 10th the following announcement:

"You are asked now to enter a record on your desk calendar that

May 11th, 12th and 13th

are the three days set for the 1939 informal gathering at Del Monte of those affiliated with the paper industry on the Pacific Coast.

"For the merchants these three days will be devoted to round-table discussions of various pertinent phases of the paper distributing business.

"Likewise, time will be set aside for merchants to meet representatives of paper manufacturerers who will be in attendance.

"Also, one evening will be devoted to a joint meeting to listen to qualified speakers on some general problems affecting the industry.

"Preparations are already under way for the annual golf tournament and other sports events.

"The plan followed in 1938 of adding a small registration fee to your hotel bill to cover costs of printing, postage and hotel employee gratuities, will be followed again this year, the amount to be determined by attendance and assessed against representatives of merchants and manufacturers alike.

"A later letter will follow, giving you details of hotel rates, definite plans for the golf tournament, and other incidental information.

"Meanwhile I am expressing the hope that you will 'tab' these dates as one of your 'must' programs for the month of May."

Heitman Transferred To Sioux City

● William Heitman, former district manager in Los Angeles for the Northern Paper Mills, is now located at Sioux City, Iowa, with the same company. "Bill" was one of the most active and best liked members of the Paper Mill Men's Club of Southern California.

Irving Damon is the new district manager for the company in Los Angeles. Mr. Damon during his connection with the firm has done specialty sales work in every major city of the country with the exception of the Pacific coast cities.

Commercial Paper To Sell Pine Tree Cover

● Marcus Alter, president, Commercial Paper Company, San Francisco, recently announced that his company had been made exclusive Northern California distributor for Pine Tree Cover, manufactured by the Pejepscot Paper Company, Brunswick, Maine.

Crown Transfers Ed Partland

● Ed Partland of the Crown Willamette Paper Company was transferred from the citrus wrap division of the company in Los Angeles to the fruit wrap division in the San Francisco office. Ralph Moslander of the San Francisco office of the firm was transferred to the post formerly held by Mr. Partland.

Paper Mill Mens' Club Stages "Dividend" Party

● Some seventy members and guests of the Paper Mill Men's Club of Southern California celebrated the annual Dividend Party of the organization March 9 at the California Country Club, Culver City, California. The committee, self-styled the Three Musketeers, Edward N. Smith, Frank R. Philbrook, and Charles Spies, did themselves proud.

Eighteen hardy souls braved the inclement weather during the afternoon and fought it out for an equal number of holes of golf. Those playing were George Wieman, Frank Philbrook, Charles Digby, Lee Lamboy, N. C. Robinson, J. W. Genuit, H. S. Fields, W. A. McBride, P. R. Raab, A. C. Hentschel, E. P. Partland, R. H. Tiley, N. A. Green, A. L. Fox, C. F. Jenkins, S. G. Yount, A. A. Ernst, I. E. Damon. Blind Bogey winners were C. Francis Jenkins and George Wieman, first and second respectively.

An excellent steak dinner was served followed by several lively acts of vaudeville including a magician as master of ceremonies, a cowboy rope artist, an accordionist and a singer.

PUGET SOUND POWER & LIGHT COMPANY

Osborne Doan Married in February

● Wedding bells rang out the 17th of last month for Osborne C. Doane, president of Doane Paper Company, San Francisco. Mrs. Doane was Bernice Hess, also a San Franciscan. Following a honeymoon in Southern California, the newlyweds returned to San Francisco, where they will make their home.

Gunther Married Valentine's Day

● Chet Gunther of the Crown Willamette Paper Company, Los Angeles, was married on Valentine's Day to Miss Ruebie Denton. The marriage ceremony was performed in Los Angeles, following which the newlyweds went to Palm Springs for a wedding trip.

Dray Doesn't Allow Broken Arm to Delay Wedding

● Bert Dray, Los Angeles Division, Zellerbach Paper Co., didn't let a little thing like a broken arm disarrange his marriage plans, for while recuperating from the injury, he took unto himself a bride.

Arthur Fox Has a Baby Son

● A new paper man was born March 2 at St. Lukes Hospital, Pasadena, and carries the proud name of Gregory T. Fox. He is the firstborn of Mr. and Mrs. Arthur L. Fox. The mother is doing very nicely and the father although exhausted from giving out cigars is expected to survive. Mr. Fox is with the Western Waxed Paper Company of Los Angeles.

Skiing Catches Up with Munoz

● Bobby Munoz, Los Angeles Division, Zellerbach Paper Company, received a broken ankle, when skiing near Big Bear. Munoz had to choose between running into a young boy who had wandered into the path of the ski jumpers or turning his skis into a snow bank. Besides being a skier Munoz is an amateur boxer, and a licensed airplane pilot.

McPhee Dies In Los Angeles

● Ross McPhee, former printing paper sales manager, Zellerbach Paper Company, Los Angeles Division, died last month in Los Angeles.

Newkirk Passes In Los Angeles

● Frank Newkirk, a printing paper salesman with the Zellerbach Paper Company in Los Angeles for a number of years, died last month in the Southern California city.

Purdy of Tuttle Press Visits Edward Smith

● R. H. Purdy, vice-president and general manager of the Tuttle Press Company, and a director of the Northern Paper Company, was the guest of his life long friend Edward N. Smith while passing through Los Angeles on his way to the Hawaiian Islands. Mrs. Purdy accompanied him. On their return trip they plan to visit the San Francisco World's Fair.

Miller Visits West Virginia Mills

● D. D. Miller, San Francisco manager of West Virginia Pulp & Paper Co., recently visited the home office in New York and also the mills.

Wilson Returns From Caribbean Trip

● S. G. Wilson of the S. G. Wilson Co., Los Angeles, returned home early in March from an extended trip through the West Indies and to the coast of South America. Mr. Wilson was in Venezuela, Trinidad, Marintique, Virgin Islands, Jamaica, and Porto Rico. On his return trip he visited with his sister in Clearwater, Florida.

Tom Lyons Breaks Elbow

● Tom Lyons of the Diamond Match Company, Los Angeles office, suffered a severe fracture of his elbow from a bad fall in the company's warehouse.

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BLEACHING
COMPANY

ORANGE
NEW JERSEY

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CELLULOSE
PURIFICATION
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ESCO STAINLESS STEEL CIRCULATING SYSTEMS now installed on 7 digesters at Longview and 6 at Everett

for Weyerhaeuser Timber Co.,
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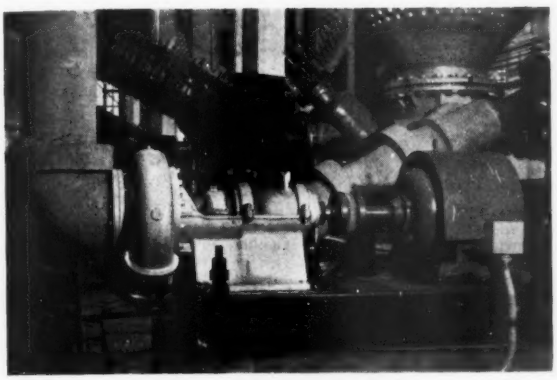
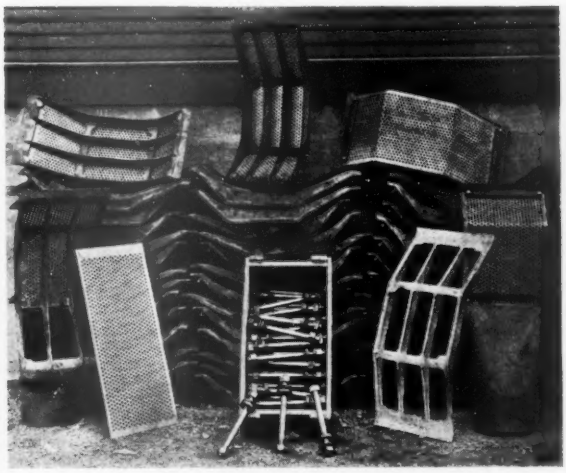


(PIPING AND PUMP SYSTEM)



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Many of the world's fastest newsprint machines are clothed with Orr Felts, which incidentally, are doing a magnificent job and stand up like the proverbial leathernecks.

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A COMPLETE LINE OF PUMPS FOR:

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- Fire protection
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- White water
- Pulp grinder pressure water
- Stock handling
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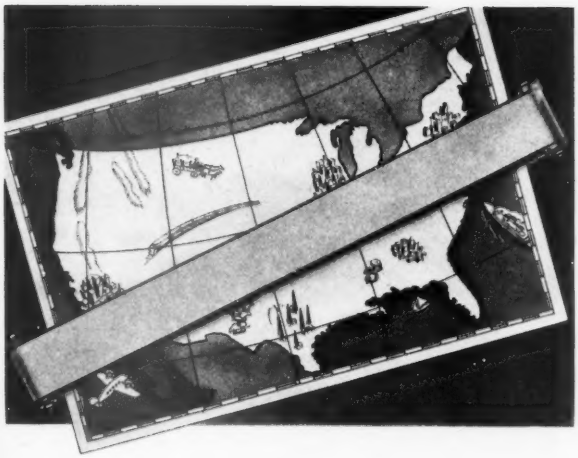

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A MONTH AT HIGH SPEED!

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Steady Operation Without Clogging

This Warren pump has a self-cleaning, non-binding impeller. Special vanes prevent stock from working behind it and jamming the pump. Large inlets insure high density stock reaching the impeller.

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Extra heavy shafts prevent vibration and deflection. Oversize bearings keep bearing pressures low. Stuffing boxes are large, easy to get at and pack.

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Liberal clearances between impeller and wearing liners and properly proportioned passages help to maintain efficiency—help to keep your pumping costs down year after year.

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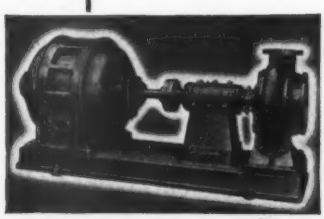

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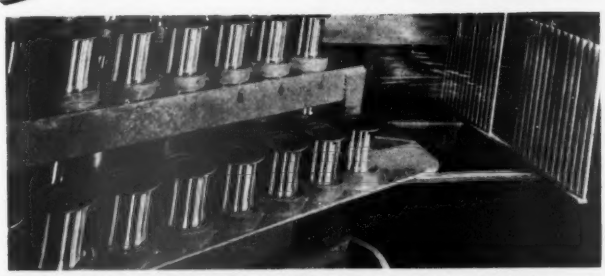

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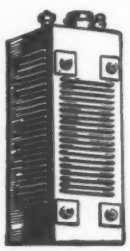

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This creates less strain on the cotton fibers when run under conditions of heat and steam, resulting in greater porosity and a longer life for the canvas.

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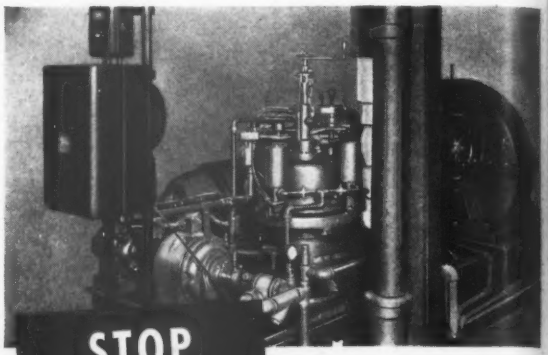

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IF YOU want an efficient turbine-speed control for paper-machine drive, follow the example of the Crocker-McElwain Company, Holyoke, Mass.

Crocker-McElwain installed a General Electric turbine equipped with a G-E governor. Since then there's been no speed "drift." Poor regulation has been eliminated. Uniformity of paper quality has been easily maintained. Small wonder the plant engineer is enthusiastic about G-E turbines.

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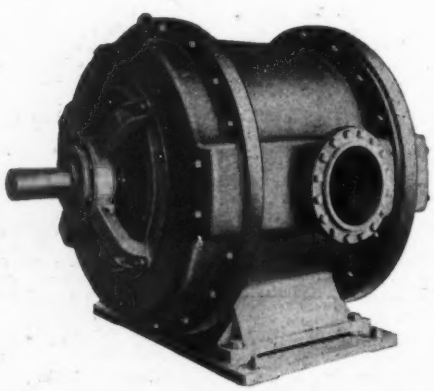

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SOUTH NORWALK, CONNECTICUT, U. S. A.

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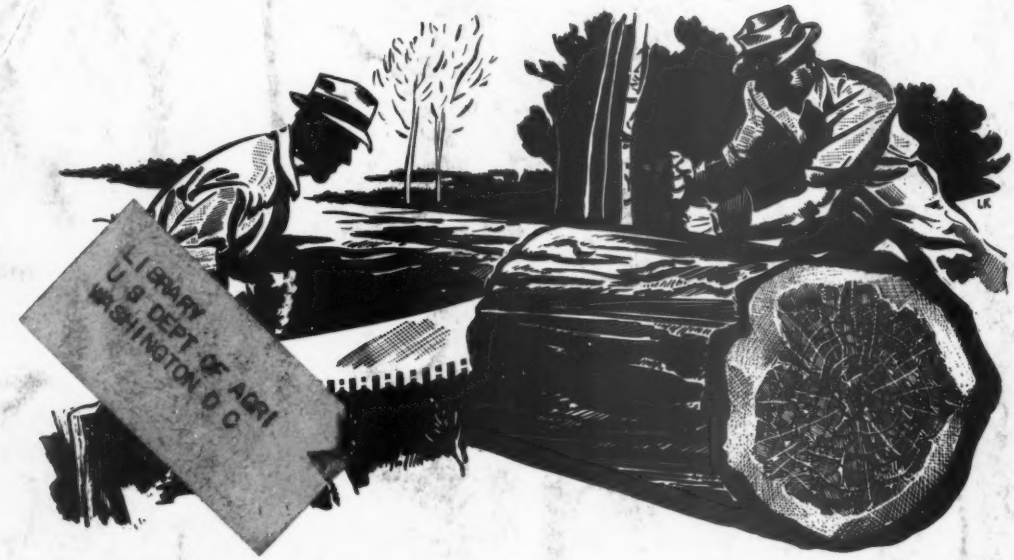

For an outlay of $85.00, the Shell representative showed this company how to cut costs in half

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